SIDS AND ENERGY FOR SUSTAINABLE DEVELOPMENT

Mr. Chairman, honorable Ministers, Excellencies,
It is an honor for me to represent the Alliance of Small Island States (AOSIS) here at this meeting, and to share with you some of our concerns with what we as Small Island Developing States (SIDS) consider to be the question of energy for sustainable development. Energy is required for development, but unless it is implemented in a sustainable manner, then we will be further hampered in our efforts for sustainable development. Hence the distinction I have just made.

AOSIS is a large group of countries, with 43 Member States and Observers from all the regions. Owing to geographical circumstances, our members States have taken different approaches in addressing matters pertaining to the promotion, encouragement and strengthening of renewable energy in the pursuit of sustainable development. The overall driving forces behind these approaches are, however, similar for all of AOSIS.

We share a common aspiration for economic development and improved living standards, while at the same time, we remain strongly committed to conserving the natural and cultural heritage upon which our future depend upon.

Mr. Chairman,

The obstacles to sustainable development are very similar throughout the member States of AOSIS. Our small size, lack of resources - both human and capital, and remoteness are some of the common features shared by our countries. SIDS are also vulnerable to economic, as well as environmental shocks. Our natural environments are fragile, and have little resilience to natural disasters; our populations are growing; given our remoteness, we are isolated from markets; we have a narrow resource base, and we face difficulties arising from economies of scale; finally, but more importantly, we continue endure high costs for energy, infrastructure, transportation, communication and access to other services.

Those obstacles are ones that we have to deal with now, yet we are also facing other obstacles of more recent vintage. A most serious environmental threats to SIDS is the continued increase in greenhouse gas emissions, which threaten our very existence. Most of our island countries are highly vulnerable to increased sea level rise - the entire territories of at least ten small island developing States are barely one meter above sea level. In addition to this, all small island developing States have highly vulnerable coastal zones where the majority of the population live and work.

Member States of AOSIS are the “frontline” states in every sense. We suffer and expect to suffer in the most direct way the full range of climate impacts – increased cyclones, droughts, hurricanes, typhoons and coral bleaching among them. All are increasing in their frequency, intensity and impacts, and we are finding it impossible to cope adequately with these shocks. The economic effects of these natural disasters are extremely serious, such as disruptions to food security, to our tourism industry, to the

fisheries and agriculture sectors, and the diversion of economic resources to reconstruction. The most disturbing for most our island countries is the disruption to our water supplies, which will be affected by salt-water intrusion. In addition to the challenges provided by climatic changes, further stress is placed on our respective island systems as our countries continue to develop.

Mr. Chairman,

As our island countries continue to develop, our reliance on fossil fuels also has increased, in particular for producing electricity. Given also our geographical settings, transportation, whether by sea or air, is proving to be the fastest growing consumer of petroleum. Whilst we recognize that energy is an important ingredient for development in all countries, it also has grave effects on our small island developing States.

Although renewable energy technologies such as solar, hydropower, biomass and to a lesser extent wind power, have already been utilized in a number of our countries to improve our communication systems, including health and education industries, there remain significant opportunities and potential to further develop these and other renewable energy resources, and for improving energy efficiency in small island developing States.

There are a number of significant constraints and barriers to the exploitation and integration of these renewable energy technologies into the urban and rural sectors. Small island developing States are, for the most part heavily dependent on fossil fuel based systems of energy generation, which are environmentally and economically unsustainable and not readily available to many remote communities. This dependency makes small islands developing States vulnerable to increased costs and uncertain supplies, which in turn slows the pace of sustainable development, in particular rural areas, and remote islands.

Access to energy supplies varies widely within and between the small islands developing States' regions. For example, it is estimated that in the Pacific Island countries, approximately 70% of people do not have access to modern energy services, with many living in remote islands or rural areas. This is a greatly different picture to the global situation where approximately 30% are without access to modern energy services. Meeting the basic energy requirements and sustainable socio-economic development needs of people with subsistence incomes therefore remains a top priority for our governments.

In other regions there is less of a problem of access, but rather of affordability. Accessibility to energy should be considered together with the reliability of supply and the affordability of prices, and to which is also closely linked to the issue of energy security.

Mr. Chairman

It is the wish of AOSIS to ensure that the international community has a better understanding of the linkages between energy and sustainable development in SIDS. There are at least two key issues need to be highlighted: energy consumption and the impacts of energy dependence and expanding access to renewable energy technologies.

As I have noted, imported fossil fuels has become the dominant source of primary commercial energy for transportation and electricity generation. We are aware that this will continue to be the case for most SIDS in the foreseeable future, despite ongoing efforts to develop alternative energy sources, unless active support can be assured. The almost total dependence of SIDS on imported petroleum for their commercial energy needs causes a severe imbalance in our trade with other countries. The rising costs of fuel imports have put a serious drain on limited national financial resources, and are made even worse when taken in the context of recent hurricanes in the Caribbean, tsunamis and typhoons in the Pacific and in the Indian Ocean. Our fuel prices are among the highest in the world, typically 200–300% higher than international values. Thus the cost of electricity generation is much higher in SIDS given issues like added costs of fuel distribution for small-scale generation systems, transportation from central distribution centers, and the overall costs of storage in limited spaces.

We should also note that most SIDS remain heavily dependent on traditional forms of energy such as fuel wood, particularly in rural and remote areas where biomass products (fuel wood from natural forests, coconut shells, husks and stem wood, residues from crops such as coffee, cocoa, maize, cassava, peanuts and rice) are used primarily for cooking purposes. In SIDS with large-scale sugar cultivation, bagasse (dry pulp residue from sugar canes) is used for fuel in sugar mills and for electricity generation. But this is not the case for rural areas. We strongly believe that savings can be made through reducing our dependence on imported petroleum or from increased use of energy efficiency and conservation measures. But most importantly there is a tremendous opportunity for us to leap-frog into renewable energy, whether these are traditional and tested, or new and innovative.

Mr. Chairman,
Many SIDS have significant renewable energy resources but these resources vary significantly across countries. One thing is clear and that is that we have an abundance of solar energy.
Direct solar energy is currently used in many SIDS for heating water, and to some extent for crop drying and processing. The use of small-scale solar photovoltaic (PV) power to provide electricity in rural areas and remote islands is occurring, and with some success, but requires further investment.
Wind power and biomass resources vary significantly with location, both within and between countries while hydroelectric power is available only in a few SIDS.
It should be noted that while traditional biomass fuel usage in SIDS tends to be both inefficient and unsustainable, biomass energy offers tremendous potential for innovative applications. Since the management and disposal of wastes is a major concern for SIDS, waste-to-energy or biogas systems need to be seriously considered for their role in converting organic wastes into sustainable energy and organic fertilizer.

As we can see Mr. Chairman, there is a lot of potential for changing the paradigm of energy and sustainable development in SIDS. There are economic benefits, as well as environmental and social benefits. We have to ask ourselves why renewable energy has not made greater inroads in our energy balance.
Our experts agree that one of the principal reasons has been the lack of technical and policy-related knowledge concerning renewable energy within SIDS. We lack appropriate institutions and do not have adequate technical capacity to evaluate new technologies and implement their usage. There are a lot of people in our countries who understand the diesel generator, but not that many who understand the workings of a solar panel.
The lack of understanding also extends to government circles, where our technical people lack the information and skills to adequately prepare renewable energy policies. In terms of the financial requirements we know that sustainable energy development requires affordable credit financing. But many SIDS do not have the available resources or the institutional capability to afford the relatively high up-front costs of renewable energy projects. Some SIDS even have difficulty with the elaborate project proposals and justification that is required by many donors and agencies.
We know that renewable energy will require political commitment and financial investments to build appropriate institutional and human capacity. AOSIS Member States are committed, but we require the assistance of the international community.

Mr. Chairman, I would like to suggest a few recommendations that could become part of this meeting's proceedings. If implemented it is our view that a significant series of benefits would accrue to SIDS.

First of all we must improve on energy efficiency. Such measures play an important role in the overall economic productivity of SIDS. One of the crucial components of a sustainable energy system is the improved efficiency of energy end-use, particularly in the tourism, agriculture and industry sectors. Policy options that support the adoption of energy efficiency measures in SIDS include the following:
1. Identification and adoption of low and no-cost energy efficiency improvements in key sectors such as tourism and agriculture;
2. Development of new regulatory and market frame-works that encourage improvements in energy efficiency;
3. Establishment of comprehensive national/regional energy policies with clearly defined energy and material efficiency goals;
4. Technical cooperation efforts particularly among other SIDS to promote energy efficiency, especially in the areas of technological innovation and adaptation, local capacity building and increased training and information; and
5. Coordinated public awareness campaigns to emphasize importance of economic and environmental gains of energy and material efficiency.

Secondly, we understand that renewable energy can clearly provide reliable, cost-effective energy services for populations living in rural and remote areas in SIDS. However, specific policy problems particular to SIDS need to be urgently addressed, such as variations in renewable energy resources availability, variations in local and national

production processes, institutional barriers, financial constraints and human capacity limitations. In order to increase the accessibility of modern and sustainable energy services, the following policy options should be considered:
1. Introduction of innovative institutional and financing mechanisms such as micro-financing, cooperative credit and leasing arrangements that allows access to energy services especially for low-income rural populations.
2. Building appropriate institutional mechanisms that promote increased investments in decentralized rural energy systems.
3. Creation of an enabling regulatory and financial environment to encourage increased private sector investment in relevant renewable energy applications.
4. Training of personnel associated with rural energy service systems.
5. Establishment of networks at the regional and sub-regional levels to encourage cooperation in adapting renewable energy technologies for use in SIDS and renewable energy related technology transfer.

Thirdly, we have noted that limitations in institutional and human capacity at national and regional level seriously impair the ability of SIDS to meet the dual challenge of developing sustainable energy resources and responding to global environmental problems. The two key constraints related to institutional capacity building are the limited availability of human resources and a lack of financial resources for developing and strengthening institutions. The central challenge is to build regional capacity (technical and institutional) that would promote effective policy responses within the SIDS.
The specific issues that need to be addressed are:
1. Development of human and institutional capacity for technological assessment and effective adaptation of relevant options in areas such as energy efficiency and renewable energy;
2. Establishment of training programs that would develop technical capacity among SIDS decision makers in the areas of integrated energy planning, energy financing, energy efficiency, rural energy development and renewable energy.

Fourth, and finally, AOSIS is interested in developing an energy agenda for sustainable development in SIDS. We are looking for pragmatic and progressive partners that will help us with practical and forward looking projects. We envisage involving relevant UN agencies and regional organizations, and to build on what has been achieved. The details of such an agenda are still being debated, but would be an overarching umbrella for the sorts of activities outlined in my statement. But it is now time to move to implementation in a manner that SIDS can truly benefit from. The lessons can then be applied to other groups of countries when they decide to pursue these options.

I hope Mr. Chairman that these comments will enrich our discussion.