<u>PGA Side Meeting to the 19th commission on Sustainable Development (CSD)</u> <u>"Non - nuclear Green Energy: Prospects for Sustaining Growth"</u>

May 12, 2011

Permanent Mission of India to the United Nations, New York

PGA organized a Side Meeting in conjunction with the 19th Commission on Sustainable Development (CSD) on 12 May 2011 on "Non-nuclear Green Energy: Prospects for Sustaining Growth". The meeting was attended by Members of Parliament from Argentina, Belgium, Dominican Republic, New Zealand, Senegal, Sierra Leone, Sweden, Suriname and Uruguay. Expert Representatives included Dr Ivan Vera, Senior Sustainable Development Officer, DESA, Mr. Stephen Gitonga, Bureau for Policy Development, UNDP and Ms. Jessica Lubetsky, Senior Associate, the Pew Charitable Trusts. The aim of the meeting was to present the latest research and developments in sustainable energy technologies and give the Parliamentarians present some practical guidance on concrete steps that could be taken to encourage domestic audiences in both developed and developing countries that sustainable energy is viable and an important tool in combating global climate change.

The meeting opened with remarks by H. E. Mr. Manjeev Singh Puri, Deputy Permanent Representative of India to the United Nations. Mr. Singh Puri emphasized that Global Climate change was impacting seriously on the whole world and India was committed to help with international efforts to address the issue. He hoped this year's climate meeting in Durban, South Africa, would make progress with international efforts to combat climate change and said that the Rio plus 20 meeting scheduled for Brazil next year had to succeed. India's Deputy Permanent Representative reminded Seminar Members that much of the world's population still struggled to meet their basic daily needs and that any moves to restrict tradition high emission energy sources had to be balanced with the financial costs of such moves.

PGA President Senator Bassey Ewa-Henshaw (Nigeria) welcomed the Expert Panel and also the PGA Members present. He reminded the seminar that PGA had since its inception in 1978 been an organization committed to raising Parliamentarians awareness of contemporary global issues, initially nuclear disarmament and the need for an International Criminal Court, but this now included global climate change and the need to build a sustainable world. Sen. Ewa-Henshaw acknowledged that there were no simple solutions to either global climate change or replacing existing high emission energy sources with renewable energy options. He gave the example of the tropical regions of his home country, Nigeria, where many poor people had no option but to collect firewood from the forest which had a huge and negative impact on declining tropical forest cover as well as contributing toward global carbon emissions.

Dr Ivan Vera, Senior Sustainable Development Officer (DESA) outlined the current global energy situation, production and consumption, and argued that all energy experts agreed that a major transformation of the World's energy systems had to occur. Current use was simply unsustainable. Billions of people still faced no access to any modern energy source or had very inadequate access. He outlined the dramatic increase in world demand for energy particularly from emerging industrial giants like China, India and Brazil and reported that global energy consumption is expected to increase by 36% by 2035. He noted existing world energy systems had extensive inefficiencies and fixing those alone could improve energy production by as much as 25%. He noted that 2.7 billion people were still using unsustainable biomass, wood or animal manures, as energy sources. In addition to the environmental impact of this practice, there were considerable risks to human health from respiratory conditions. He reported that an estimated 1.45 million people die per annum a premature death, the second highest cause of mortality in the developing world, after HIV/AIDS, from this practice.

Dr Vera stated that for most countries diversity of energy sources was important for energy security. Renewable energy provided a good way of expanding that energy diversity. He noted that while

renewable energy, excluding biomass burning, was still only a small percentage of human energy systems overall trends in increasing the use of renewable energy technologies was positive. There was considerable international interest, active legislative and regulatory moves by many countries to encourage the use of energy renewable technologies and extensive investment by some countries. In 2009 \$150 billion was invested globally, up 15% from the previous year. The Representative from DESA noted that for developing countries high capital costs and a lack of national energy assessments remain barriers to expanding renewable energy. Positive signs included the growing involvement of international financial institutions in funding energy renewal developments, the involvement of many UN Agencies in this field and growing international partnerships around developing sustainable energy projects.

Dr Vera asked Parliamentarians present if the message they could take back to their home countries where a need to ensure diversified energy sources. He said there was a critical need for accurate data and statistics on energy potential and current use in every country and was especially important in least developed countries were basic access to energy was often nonexistent. He said that in any successful energy development programme all stakeholders in a country needed to be engaged and this had to include civil society, politicians and business,

Mr. Stephen Gitonga, Bureau for Development Policy (UNDP) reminded participants in the Seminar that UNDP's mandate was to alleviate poverty by reducing inequalities. He noted that in developing countries there are usually two worlds, a small part of the community have advanced infrastructure and modern technologies. For the bulk of the population life is often a struggle to meet basic needs and any access to energy sources can dramatically lift that section of a least developed country's population. He noted that 1.5 billion of the world's population still has no access to electrical energy. Another 1 billion have only limited access. The Secretary General of the United Nations has called for each country to produce an action plan for sustainable energy by next year. The Secretary-General would like to see these action plans result in significant progress in global energy sustainability by 2030. The UNDP Representative asked parliamentarians present to encourage their individual countries to complete their energy audits and to try and promote public /private partnerships in renewable energy projects as these often made them more affordable. He noted that access to energy can transform lives and that current technologies allow quite dramatic changes for relative low cost. For example Bangladesh had transformed many remote village communities by widespread use of small solar energy technology. Mr. Gitonga reinforced Dr Vera's point about the huge health costs associated with burning organic fuels (wood and animal manures) in the least developed countries.

Ms Jessica Lubetsky from the Pew Charitable Trust outlined encouraging trends around advances in renewable energy processes that were lowering costs in moving to more sustainable technologies. She noted that if the costs which all countries pay in subsidies to large oil companies were factored in the actual real costs of renewable energy technologies was already getting comparitable. She reported that already world energy production from renewable (excluding biomass burning) had already passed the total energy production from the world's nuclear energy facilities. Installed clean energy capacity in 2010 is at 388 GW. Her message to Parliamentarians was that planning is everything and that a country needed to use policies, tax breaks public/private partnerships and other incentives to encourage sustainable energy production. All policy should be transparent, long term and have clarity. She asked Parliamentarians to work toward the elimination of the huge subsidies currently enjoyed by oil and gas companies globally.

Dr Bernadette Lahai MP (Sierra Leone) gave a comprehensive outline of energy issues facing developing countries, particularly in West Africa. She talked about how the use of mobile phones and other basic modern communication technologies, using solar energy as a power source, had transformed village health services and lowered the rate of maternal mortality dramatically in her country by allowing health workers to access immediate medical advice and help from quite remote areas. She noted that the development of even basic technologies was often beyond the financial resources of the least developed countries and that the richer countries needed to provide continued financial support.

Ms. Marie Norden MP (Sweden) reported that environmental concerns had been a top priority for successive Swedish Governments since the 1970s. Sweden had demonstrated that economic growth can happen while significant reductions in carbon emissions are taking place through progressive government actions. Sweden has also ensured that local government and communities have become very involved in energy efficiency measures as a way of getting grassroots support for such measures. She believed that industrialized countries must accept responsibility for the pace of global climate change and there was a strong case to transfer wealth to developing countries in order to address a global issue like climate change.

Ms. Margarita Stolbizer MP (Argentina) noted that Argentina had experienced rapid economic growth in recent years and this had created huge demands for more energy sources. Argentina's accession to the G20 had, she believed, focused Argentine officials and politicians on topical international issues like environmental sustainability. President Christina Kirchner had established a new government ministry which had responsibility for technology and energy production. The debate around Argentina's nuclear waste had helped raise issues around "clean' energy and this was an ongoing public debate.

Dep. Alain Destexhe (Belgium) outlined that Belgium had taken extensive steps to promote sustainable energy measures from electric cars to home insulation. So far public take up of some of these measures was limited. Solar heating panels and electric motor vehicles, in spite of considerable promotion and tax incentives, had not had extensive public patronage. Nuclear power accounts for the production of 55% of Belgium's energy needs but the Belgium authorities had committed the country to eliminating nuclear energy production by 2025 and planned to have 30% of the country's energy needs being produced by sustainable renewable energy by 2020.

Dip. Minou Tavarez Mirabal (Dominican Republic) reported on the chronic energy shortages currently being experienced in the Dominican Republic. She felt much of this problem lay in political and administrative weaknesses in addressing issues like infrastructure planning and resource allocation. Some hydro production has already happened and in 2007 a law was passed promoting sustainable green energy technologies but other than water sources for hydro-electric power generation nothing much else had happened in spite of the new legislation. The population was feeling increasingly frustrated over the issue of energy supplies and the issue of possible nuclear energy development was being discussed. Dip. Tavarez Mirabal did not think this would occur due to cost, the controversial nature of the nuclear debate and recognition of the unstable seismic nature of her region.

Hon. Ross Robinson MP (New Zealand) reported that his country, like Iceland, was fortunate that it is one of the few countries in the world already able to produce the majority of its energy needs from renewable clean energy sources. These include hydro, geothermal, wind, solar and in very recent times the beginnings of technological measures that could harness wave power as a clean energy option. The central government has taken extensive measure to promote energy efficiencies which include home insulation, recycling of waste water and the promotion of large wind energy projects. There is now a carbon trading regime in domestic legislation which is designed to motivate industry and agriculture to conserve energy and look for clean renewable options.

Dr. Ruth Wijdenbosch MP (Suriname) reported that Suriname had made considerable investment in hydro energy production and was an energy rich country. Currently 90% of Suriname's energy comes from hydro-electric generation although there is also research being conducted into ethanol. The Parliament had discussed nuclear options but the dangers and the cost as well as Suriname's fortunate water energy resources made nuclear power a very unlikely scenario.

Mr. Fallou Mbacke MP (Senegal) reported that all of Senegal's energy was imported. The country needed assistance to develop non-nuclear energy options and no national energy assessment had been carried out. The national legislature had not addressed the issues of energy resources but some private companies were currently engaged in exploring bio-fuel options.

Dip Felipe Michelini MP (Uruguay) noted that his country had banned nuclear energy as an option in 1998. Most energy needs are currently met by hydro and oil. The Government has taken extensive measures to promote energy efficiencies and allow the state monopolies in power production and in energy distribution to open access to private companies and individuals providing clean renewable energy production. This was mainly been wind and solar.

PGA Secretary-General Shazia Rafi in her concluding remarks summarized the importance of providing energy to the least developed countries in order to help meet the Millennium Development Goals for the over 1.4 billion people currently without access to any energy sources except burning biomass. She noted that researchers were now beginning to appreciate the very serious health risks associated with the burning of biomass. She encouraged Parliamentarians present to raise in their home countries the need to do research on energy needs, seek to develop public /private partnerships to lower the costs of poorer countries attracting investment in renewable energy technologies and work toward educating the public about the advantages of renewable energy and the positive impact such processes could have on global carbon emissions.

The objective of the meeting was to hear from a range of energy experts about the latest research and technologies associated with renewable green technologies and to receive reports from PGA members present on the status and progress of sustainable energy developments in their own countries. Panelists and participants made concrete recommendations on how to promote renewable energy in their own countries which included both developed and developing nations.