

Climate Change and Energy Access

International Parliamentary Hearing for Caribbean Legislators

14th-15th March 2009 in Georgetown, Guyana



Sea-level rise could be devastating in Guyana as much of the coastline is already below sea level.

Summary report

This hearing was the fourth in a series of nine that are taking place in African, Pacific and Caribbean (ACP) states between 2008 and 2010. Previous hearings have taken place in Kenya, Ghana and Tobago.

This hearing brought legislators from Caribbean countries together with experts in the fields of renewable energy, climate change and energy access for two days of in-depth discussion. The 17 legislators – from the Bahamas, Barbados, Belize, the Dominican Republic, Haiti, Jamaica, St Kitts and Nevis, St Lucia, Trinidad and Tobago as well as Guyana – heard expert presentations on solar, wind, hydro and geothermal energy. The hearing was also attended by both Prime Minister Samuel Hinds and President Bharrat Jagdeo of Guyana. The hearing was funded by the European Commission and the Swedish Development Agency (Sida) to encourage legislators to promote energy access for the poor while simultaneously addressing climate change.

The session was opened by the **Prime Minister of Guyana, Samuel Hinds**, who set the scene by drawing the clear link between climate change and development. He said that Guyana, like other developing countries, is anxious to reach a higher level of development, but that the threat of climate change has now become very, very serious and cannot be ignored. Both of these problems must be addressed simultaneously.

Prime Minister Hinds pointed out that discussion on climate change takes place against a background of assumptions and world-views that need to be reassessed. The Earth's resources are finite, and the world's



Prime Minister Samuel Hinds emphasised the link between climate change and development.

people are bound by a “common destiny”. In order to tackle climate change, we must accept these two truths and look for solutions that are fair and just.

Dr. Neville Trotz of the CARICOM Climate Change Center gave a striking presentation outlining the impacts climate change will have, and indeed is already having, on Caribbean states. He emphasised that changing weather patterns and sea level rise are of grave concern not only from an environmental perspective, but also from a developmental one. In this context he placed the need for an urgent reduction of greenhouse gas emissions, and hence the importance of renewable energy technologies.

Dr. Indra Haraksingh, physics lecturer at the University of the West Indies, presented the various renewable energy options available to

Caribbean states and gave an overview of their possible applications. As well as resources that can be harnessed on a large scale, she showed how some powerful renewable energy technologies, like solar water heaters and solar cookers, can be deployed cheaply and quickly.

Kerry McDonald of West Indies Power Ltd. briefed legislators on the potential for geothermal power in the region, and showed them how West Indies Power Ltd. is already harnessing this resource. Legislators were particularly excited by the power plants installed in Nevis, which by next year will supply 100% of electricity for St Kitts and Nevis, making it the least fossil fuel dependent country in the world. He also revealed a possible scenario for exporting geothermal power to neighbouring countries through undersea cables.

Dr. Trevor Byer, director of the Association of Caribbean Energy Specialists, expanded on the idea of energy trade by outlining the concept of regional energy clusters. He showed various possible energy-sharing projects using undersea HVDC cables, such as sharing hydro power from Guyana with Trinidad and Northern Brazil, or connecting all the islands in a line from Anguilla to Grenada. Dr. Byer also explored in some depth the need for innovative financing methods, and regulatory frameworks to encourage investment in renewable energy projects.

The Sunday session opened with a presentation by **Joseph Williams**, Programme Manager for Energy at CARICOM, who explained the organisation’s approach to promoting renewable energy and supporting renewable energy projects in the region. He emphasised the advantages of taking a regional approach, and of having the right policy framework to put renewable energy technologies on an equal footing with conventional energy sources.

Stefan Schurig of the World Future Council highlighted policy instruments that legislators can use to encourage private investment in renewable energy, focusing in particular on feed-in tariffs (FITs). He explained the core features of a successful FIT, and showed how Germany’s FIT has led to the development of a very strong renewable energy sector. He also suggested developing a task force made up of MPs, business people, experts and civil society to promote the use of renewable energy technologies in the Caribbean.



This was followed by a presentation by **Kevin Deveaux** of the United Nations Development Programme, who focused in on the kinds of procedural steps that parliamentarians could take on returning to their home countries. He explained how MPs can use their different roles – as legislators, overseers and representatives of the people – to leverage change within a Parliament. He offered to support any of the participants who needed assistance in drafting legislation or taking action after the hearing.

In the afternoon, Guyana's President, **Bharrat Jagdeo**, joined the group for an interactive discussion of obstacles and different approaches to promoting renewable energy. The President shared much of Guyana's experience in attempting to adopt a low-carbon pathway, and stimulated a lively discussion among the participants.

Several key points were raised throughout the discussions. The legislators recognised a need to establish action plans and deadlines for what sort of renewable energies to develop and when. They also agreed that Caribbean countries should promote energy trade between countries to make use of renewable energy sources where they are most abundant. In addition, Caribbean countries should develop a united voice on international climate funding measures such as the Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Degradation (REDD), to ensure that smaller countries get their fair share of funding. There was also a significant degree of interest in establishing FITs, as well as in undertaking small-scale energy projects, such as installing solar water heaters, and increasing the efficiency of government buildings. The importance of community-sensitisation to renewable energy issues was another key point recognised by the participants. Many legislators also emphasised the importance of continuing to share information after the hearing, with each other as well as with their colleagues in their home Parliaments.

The detailed report of the Guyana hearing is divided into four sections:

1. Participants
2. Action Ideas Discussed
3. Follow-up Actions
4. About the e-Parliament and the World Future Council



Legislators, experts and e-Parliament staff with President Bharrat Jagdeo (centre front) at the Grand Coastal Inn in Georgetown.

1. Participants

Bharrat Jagdeo, President of Guyana

Samuel Hinds, Prime Minister of Guyana

MEMBERS OF PARLIAMENT

Picewell Forbes MP, The Bahamas

Patricia Innis MP, Barbados

Senator Pulcheria Teul, Belize

Minou Tavaréz Mirabal MP, Dominican Republic, Member of Energy Committee

Dharamkumar Seeraj MP, Guyana, Member of Economic Services Committee

Winston Murray MP, Guyana, Member of Economic Services Committee

David Patterson MP, Guyana, Member of Economic Services Committee

Odinga Lumumba MP, Guyana, Member of Natural Resources Committee

Pauline Sukhai MP, Guyana, Minister of Amerindian Affairs

Jean Beauvoir Dorsonne MP, Haiti

Sharon Hay-Webster MP, Jamaica

Michael Peart MP, Jamaica

Senator Hyacinth Bennett, Jamaica

Carlisle Powell MP, St Kitts & Nevis, Junior Minister for Works, Public Utilities, Natural Resources and the Environment

Moses Jn. Baptiste MP, St Lucia

Senator Dr. Adesh Nanan, Trinidad & Tobago, former Environment Minister

Pennelope Beckles MP, Trinidad & Tobago, former Environment Minister

EXPERT PRESENTERS

Dr. Neville Trotz, CARICOM Climate Change Centre

Kerry McDonald, West Indies Power Limited

Dr. Indra Haraksingh, Professor, University of the West Indies

Stefan Schurig, Director of Climate and Energy, World Future Council

Joseph Williams, Programme Manager for Energy, CARICOM

Trevor Byer, Director, Eastern Caribbean Gas Pipeline Company (ECGPC) and Director, Association of Caribbean Energy Specialists (ACES)

Kevin Deveaux, Parliamentary Development Policy Advisor, United Nations Development Programme

E-PARLIAMENT STAFF

Jesper Grolin, Executive Director

Susana Guerreiro, Programme Officer for Climate, Energy and Ecosystems

Kitty Garden, Programme Officer

2. Action Ideas Discussed

CLIMATE CHANGE AND ITS IMPACT ON THE CARIBBEAN



Dr. Trotz told legislators that weather patterns in the Caribbean have already changed significantly.

Dr. Neville Trotz of the CARICOM Climate Change Center (CCCCC) began by outlining the effects of climate change that are already being felt in the Caribbean, and giving an overview of further projected changes foreseen by both his own organisation and the International Panel on Climate Change (IPCC). Throughout his presentation he emphasised that climate change is not only an environmental problem, but also a developmental one.

Dr. Trotz showed that there is direct regional evidence that the Caribbean is already warmer, and that normal rainfall patterns no longer apply. He pointed out that historic weather data is no longer adequate in the face of dramatically changing weather patterns. For example, Guyana experienced “once in fifty year floods” in 2005, 2006 and 2007. Thus new projections are vital for understanding the new and changing weather patterns.

Dr. Trotz explained that the main impacts of climate change in the Caribbean region include temperature rise, changed rainfall patterns, sea-level rise, and increased intensity of hurricanes. These lead to knock-on effects such as the drying out of soil, salt water intrusion into aquifers, and increased erosion due to storm events. Needless to say these kinds of changes have dire consequences across all sectors, from food production to tourism, not to mention the human cost of extreme storm events.

In the face of all these impacts, Dr. Trotz emphasised the importance of taking immediate action, and explained that the sooner effective action is taken to stop climate change, the less costly it will be in the long run. He highlighted the importance of reaching agreement in Copenhagen to at least stabilise temperatures at no more than 2°C warmer than pre-industrial temperature levels, which means reducing the carbon in the atmosphere to 450 ppm. He mentioned financing tools such as the Clean Development Mechanism (CDM), which could help developing countries to reduce their emissions through investment from developed countries.

RENEWABLE ENERGY OPTIONS

Dr. Indra Haraksingh, physics lecturer at the University of the West Indies, gave an overview of the potentials of solar thermal, solar photovoltaic, wind, biomass and hydropower in the Caribbean.

She began by explaining that, although the Caribbean region has a huge renewable energy potential, currently only 3% of electricity in the region comes from renewable energy sources, while 93% comes from burning fossil fuels. She pointed out that all Caribbean islands have vast solar and wind resources, and that many of the countries are also blessed with hydro, biomass and geothermal potential.

A point of particular interest to the legislators was the potential for solar cookers and solar water heaters. Dr. Haraksingh showed how these two technologies are inexpensive, simple and highly effective. Installing solar water heaters in all the hotels in the Caribbean would have a huge effect on the region’s electricity consumption, as the region is home to over 85,000 hotel rooms. Barbados has excelled in the manufacturing and installation of solar water heaters, with the 5th highest penetration of the technology in the world (35% of



Dr. Haraksingh explained the benefits of simple renewable energy technologies like solar water heaters and solar cookers.

households have a solar water heater installed). Dr. Haraksingh said that this success was due to fiscal and financial incentives put in place by the government in the 1970s.

She listed some of the factors holding back renewable energy development in the Caribbean, including the monopolies held by utilities, a lack of information and consumer awareness, inadequate financing, lack of energy policies and strategies, and an untrained workforce. She highlighted four key requirements for advancing the use of renewable energy in the region: incentives and tax breaks, an appropriate regulatory framework, education and capacity-building, and political will.

GEOHERMAL ENERGY



Legislators heard how St Kitts & Nevis will soon get 100% of its electricity from indigenous geothermal sources.

In the afternoon **Kerry McDonald** of West Indies Power Ltd. briefed legislators on the possibilities for geothermal power in the region, and showed legislators how his company is already harnessing this resource. Legislators were particularly excited by the 40mW project installed in Nevis, which by next year will supply 100% of the electricity consumed in St Kitts & Nevis, making it the least fossil fuel dependent country in the world. In the second phase of this project, capacity will be doubled in 2014 to 80 MW so that power can be transmitted using high voltage direct current lines to other islands: initially the Virgin Islands, but there has also been interest from the Dominican Republic and Puerto Rico. This is the first step in the Caribbean Interconnect project, whereby geothermal-producing islands could export energy to neighbouring countries through undersea cables for only 10-13 US cents per kWh, including the costs of transmission.

As Mr. McDonald explained, geothermal plants emit nothing, have the smallest footprint of any power source, and the energy they produce is completely renewable. Geothermal energy has been in commercial operation since 1902. The Caribbean region as a whole has 10,000mW of geothermal potential, located in Dominica, Grenada, Guadeloupe, Martinique, Montserrat, Nevis, Saba, Statia, St Kitts, St Lucia and St Vincent. Although some of these sources have limited commercial potential due to a lack of fluid in the ground, or lack of flat terrain, there is still enough geothermal potential in the Caribbean to serve 100% of the region's electricity needs.

Mr. McDonald emphasised the importance of political action in encouraging geothermal development, and pointed out that the Nevis geothermal project was only possible because of the political decisions taken by Minister Powell and his colleagues.

SUB-REGIONAL CLUSTERS AND PATHWAYS TO REGIONAL ENERGY INTEGRATION IN THE CARIBBEAN

Dr. Trevor Byer, Director of the Association of Caribbean Energy Specialists, continued on the theme of energy-sharing, and expanded the concept to include all renewable energy sources available in the Caribbean. The premise of his presentation was to look at which countries have an abundance of renewable energy sources, and which countries nearby have energy deficits. He then grouped these countries together to form energy-trade "clusters". Some of the clusters suggested by Dr. Byer were: Belize, Mexico and Guatemala; Guyana, Brazil and Trinidad; Trinidad and Tobago and Grenada; and a string of islands from Guadeloupe to Tobago. Dr. Byer pointed out that energy trade is not a new concept – for example, Belize has imported electricity from Mexico for years.

He emphasised that finance is a critical factor in these energy trade projects, and that they cannot go ahead without a credit-worthy purchaser. He also suggested some institutions that would



One possible configuration of an energy trade "cluster".

encourage investment and the financing of projects, including an Eastern Caribbean-wide regulatory authority and a Caribbean Power Holding Company. He highlighted the importance of local expertise and investment in energy projects due to the Caribbean's unique characteristics.

Dr. Byer stressed the fact that lessons learned from energy sector reform in OECD countries cannot always be applied to developing countries, and particularly not to the small Caribbean island states. For example, complete unbundling of generation, transmission and distribution was promoted forcefully by international financial institutions, but proved to be unworkable in small energy systems. Dr. Byer explained that keeping transmission and distribution bundled maintains economy of scope and economy of scale, and eliminates the need for complicated negotiations and agreements between parties – all of which are important given the small size of Caribbean countries and their electricity markets.

THE CARIBBEAN RENEWABLE ENERGY DEVELOPMENT PROGRAMME (CREDP) AND BEYOND



Mr. Williams explained how government action can "level the playing field", allowing renewable energy to compete.

The Sunday session opened with a presentation by **Joseph Williams**, Programme Manager for Energy at CARICOM, who explained the developments in the regional organisation's approach to promoting renewable energy, including some of the barriers they have faced and lessons learned.

Mr. Williams began by giving an overview of the Caribbean energy sector. He pointed out that since 90% of the region's commercial energy needs currently are met by imported petroleum, increasing the use of indigenous renewable energy sources is critical for long-term energy security. However, as national markets are small in the Caribbean, it is essential to have a regional approach in order to make the expansion of renewable energy viable.

The main barriers to RE development are currently the lack of an adequate policy framework, inadequate financing options, limited public and political awareness and a lack of capacity and expertise. Mr. Williams thought that the right policy framework could help to overcome all the other barriers to renewable energy development.

Renewable energy, he explained, is at a disadvantage compared with conventional energy sources due to the fact that many of the costs of conventional energy sources are not taken into account in the price of electricity, such as environmental costs and health costs. Government action is thus necessary to "level the playing field", to ensure that all real costs are taken into account, allowing renewable energy to compete. In addition, innovative financing methods are needed as investors are often scared off by the perceived high risk and the high upfront development costs of renewable energy projects. Once renewable energy technologies are on an equal footing, they will in fact be much cheaper to run in the long term since, unlike conventional energy sources, they have no ongoing fuel costs.

Mr. Williams explained that the Caribbean Renewable Energy Technical Assistance Facility (CRETAF), a sub-project of the Caribbean Renewable Energy Development Program (CREDP), was set up to provide funds for early development of renewable energy projects. Under this scheme, loans would only need to be repaid if a project became commercially viable. This was intended to reduce the upfront risks of undertaking a new project. Unfortunately, the programme had significant difficulties in identifying an appropriate regional financial body to act as Facility Manager, and thus was not successful.

Mr. Williams said CARICOM intends to build on the lessons learned from the failure of CREDP, and he was optimistic about the prospects of its new Energy Programme, established in April 2008. The Programme's objectives are to finalise and implement a Regional Energy Policy (REP), and to encourage a harmonised approach to energy development in the region. It also recognises the need for a Regional Sustainable Energy Road Map for the Caribbean, to ensure a targeted, prioritized approach to the implementation of sustainable energy development. The Road Map would form the basis for commitment from Member

States, and for the development of strategies as well as allowing for identification of priorities and investment requirements.

CREATING STRONG MARKETS FOR RENEWABLE ENERGY



Mr. Schurig showed how FITs have helped to create a booming solar industry in Germany.

Stefan Schurig of the World Future Council (WFC) focused his presentation on a key policy instrument that legislators can use to encourage private investment in renewable energy – Feed-In Tariffs (FITs). FITs impose a legal obligation on utilities and energy companies to purchase electricity from renewable energy producers at a favourable price per unit, and this price is guaranteed over a long time period (usually about 20 years).

According to Mr Schurig, a FIT must include a long-term incentive to ensure continued maintenance of renewable energy facilities. He added that the tariff should be adjusted to the state of development of the technology, and that there should be a regular monitoring process to update tariff rates.

Mr. Schurig described how successful the FIT model has been in Germany, and compared it with the United Kingdom’s quota system, which sets a specific target for the amount of renewable energy electricity to be fed into the grid, and has been much less successful.

Mr. Schurig also spoke about sustainable energy strategies in general, and highlighted three key components: Increasing energy efficiency and energy saving, developing a national and international renewable energy sector, and creating an intelligent allocation grid. He suggested creating a task force of MPs, experts and business people in the Caribbean region. This task force should not only work to foster national renewable energy sectors in the Caribbean, but promote skill-sharing between Caribbean countries, and bring a united Caribbean voice to industrialised countries and in international forums such as the UNFCCC conferences. He pointed out that a similar task force has been very successful in the US in the form of the Alliance for Renewable Energy.

TOOLS FOR BUILDING POLITICAL SUCCESS IN RENEWABLE ENERGY

Kevin Deveaux of the United Nations Development Programme, focused in on the kinds of concrete actions that parliamentarians could take on returning to their home countries. He pointed out that each country’s parliamentary system has its own idiosyncrasies, meaning that different types of action will be more or less effective in different places. For example, in countries where political parties have a lot of power, the best tactic could be to approach a party leader and convince them to put renewable energy on the party’s agenda. In other cases, it may be more effective to approach MPs on relevant committees, or even to engage with government officials. MPs must consider all aspects of their role, as legislators (defining laws, regulations and policies), overseers (participating in question time, committee hearings, etc) and representatives of the people (creating and responding to demand for change).



Mr. Deveaux emphasised that MPs can create a demand for change where it does not already exist.

In addition, Mr. Deveaux pointed out that some countries have more advanced renewable energy policies or strategies than others, which also affects the kind of actions that are most appropriate. For example, in a country where renewable energy has not been considered before, a National Action Plan may be the most appropriate step. In other cases, there may be a place for feasibility studies, or it may be time to begin drafting policies or propose tax incentives.

Mr. Deveaux highlighted the dual role of parliamentarians – being both reactive and proactive. Members of Parliament must represent the attitudes and wishes of their constituencies, but they can also create a demand for action, and use law to promote change. It is essential for a parliamentarian to find a balance that combines the benefits of both leading and following.

Mr. Deveaux pointed out that often it is difficult for a single MP to take action alone in a Parliament, and that not all MPs have the resources or the expertise to draft their own laws. He explained that even if an MP does not draft a law themselves, there are many things they can do to move things to the point where a law will be drafted by someone else. And in the case where an MP would like to draft a law, Mr Deveaux emphasised that there is help available from organizations like the UNDP and the WFC.

PARLIAMENTARY DIALOGUE

The President of Guyana, **Bharrat Jagdeo**, joined the final session, in which Parliamentarians discussed how to proceed with promoting renewable energy in the Caribbean. He began by posing a question: technical experts have known for a long time that renewable energy is something worth pursuing, so why has there been so little progress in the Caribbean? He responded that it is largely due to lack of funding, though in some cases it is also a technological issue. Thus, it is essential that a framework be developed that allows for the financing of renewable energy projects – be this through the carbon market, direct transfers, a carbon tax, or a market fund with a system of guarantees.



President Jagdeo pointed out that a significant part of the cuts in carbon emissions that need to be made to avoid catastrophic climate change must come from the developing world, and that in order to make these cuts, over 100 billion euros of investment will be needed. He emphasised that a large part of this money needs to go into research and development in order to shorten the learning curve so that renewable technologies can be deployed quickly.

President Bharrat Jagdeo (left) said that lack of funding was the main reason for the slow uptake of renewable energy technologies in the Caribbean.

Patricia Inniss of Barbados asked about easy first steps that can be taken, and President Jagdeo replied that measures which increase energy security and are cost effective are the easiest to implement. For example, energy efficiency policies on a family scale, such as giving tax breaks for energy-efficient light bulbs, are particularly effective. He also spoke of Guyana's pilot programme of providing one thousand solar panels, at a cost of about US\$150 each, to Amerindian households.

There was general agreement that stronger targets for emission cuts were needed internationally – many supported an 80% cut in emissions by 2050. There was also recognition of the need for leadership on the issue of climate change and renewable energy in the Caribbean, and in particular that the matter should be brought up at the upcoming Summit of the Americas. Dr. Trotz urged that industrialised countries be made aware of the vulnerability of Caribbean states, but also of the opportunities for investment. Rather than begging for aid, the Caribbean countries must demand that industrialised countries take responsibility for the consequences of their polluting development path. Stefan Schurig in particular pointed out that the CDM scheme is undergoing changes in the next few months, and that now is a good time for the Caribbean to make a case for receiving financing through CDMs. It was agreed that the key to making the Caribbean voice heard internationally was improving the regional coordination of policies and positions.

It was emphasised several times that reducing emissions is not a question of stopping industrialisation, or of giving up on increasing prosperity, but rather a question of increasing prosperity in a different way. There needs to be a premium for externalities on products produced so that people pay their real price. Jesper Grolin pointed out that those who move quickly to renewable energy sources may indeed be the ones to enjoy “the good life” in years to come.

Several of the MPs were concerned about community-level awareness and education on renewable energy issues. Moses Jean Baptiste MP of St Lucia pointed out that terms like “carbon footprint” and “carbon market” are often not well understood in the wider community. President Jagdeo emphasised that it is necessary to create a narrative that people can understand, rather than just technical discussion. He said that this is not only the responsibility of politicians, but also of journalists and academics.

There was mention of the need to reform international financial institutions such as the World Bank, to make more funding available to the Caribbean for climate change adaptation. President Jagdeo pointed out that the natural disasters in the Caribbean are often systemic, affecting an entire country and not just an isolated part as in larger countries. Sharon Hay Webster, MP from Jamaica, was also vocal about the need for resettlement plans for communities that would be displaced by climate change.



Patricia Inniss MP of Barbados was looking for easy first steps to get renewable energy started in Caribbean countries.

Dr. Byer emphasised that while governments must focus on making policies, implementation is also important. He pointed out that action comes from partnerships between governments and the private sector, or partnerships between local and foreign companies. Thus, governments need to strike a balance between creating the right policy framework, and bringing in the private sector – there is no point in having a policy if it is not transformed into action. He also said that regional policy-makers need to carefully take into account the different priorities of national governments.

A few MPs had concerns about the negative image of certain renewable energy technologies, such as the perceived visual and noise pollution caused by wind turbines. Here it was agreed that public education is very important, informing the general public about the social and environmental benefits of these technologies. Also, there must be certain regulations governing where the technologies can be installed, and local governments and communities must also be involved in these decisions.

The participants agreed to a **communiqué** highlighting key priorities for addressing climate change and promoting renewable energy use in the Caribbean. They agreed:

- That Caribbean countries should establish action plans and deadlines for what sort of renewable energies to develop and when. Also they should work on anticipating the problems of sea-level rise and identifying potential resettlement scenarios.
- That Caribbean countries should promote trade in energy within clusters of Caribbean states. The legislators were particularly inspired by the example of the planned trade in geothermal energy from the island of Nevis, and hoped that other groups of islands could develop a similar trade in energy.
- That Caribbean countries should coordinate their policies on international climate funding measures such as the Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Degradation (REDD) so that they develop a united voice at climate conferences. This united voice would help in making sure that smaller countries get their fair share of funding.
- That Caribbean countries should establish feed-in tariffs where appropriate.

- That Caribbean countries should ‘pick low-hanging fruit’ – that is, undertake small-scale energy-saving projects which could make a big difference without too high investment. In particular they expressed interest in the idea of installing solar water heaters on hotels, noting that this could substantially reduce the fossil fuel consumption of the tourism industry.
- That Caribbean countries should make government buildings an example by equipping them with renewable energy and making them energy efficient.
- That it was important to emphasise the need for community-sensitisation to renewable energy since the public at large does not always understand the need for such a transition to renewable energy.
- That it was important to emphasize that rich developed nations produce the vast majority of CO2 emissions and that these countries need therefore to accept the burden of adjustment in solving the climate change problem.
- That it was important to emphasise the value of standing forests as a sink for CO2.
- The legislators present agreed to share information after the hearing and to continue to inspire each other to pursue the promotion of renewable energy.



3. Follow-up Actions



Senator Adesh Nanan of Trinidad and Tobago pledged to move a motion in parliament to adopt a low-carbon pathway for Trinidad and Tobago and to promote renewable energy projects.



Sharon Hay Webster, MP of Jamaica, also recognised the importance of encouraging the government to adopt a low-carbon pathway. She proposed to work with Senator Bennet, also of Jamaica, to carry out discussions with teachers to include education on climate change issues in schools.



Patricia Inniss, MP of Barbados, promised to take on an advisory role, informing her colleagues of the issues discussed at this hearing, and planned to compile a succinct communiqué informing influential MPs on the e-Parliament and World Future Council. She also requested the help of Stefan Schurig to get information on FITs and CDMs to pass on to other MPs.



Moses Jean Baptiste, MP of St Lucia, also agreed to prepare a report on the hearing and to circulate it to other MPs, as well as to the media and civil society groups promoting Renewable Energy. He emphasised the importance of taking action within his constituency, and pledged to engage in town hall meetings and simple conservation activities, such as distributing energy-saving light bulbs. Finally, he proposed to start an advocacy group in St. Lucia, joining individuals from civil society who are interested in promoting renewable energy.



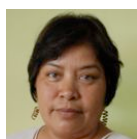
Minister Pauline Sukhai of Guyana promised to continue calling for the distribution of solar panels to families in hinterland communities, and to promote the use of renewable energy technologies to support livelihoods and transform the economies of remote and indigenous communities. She said that she would contact the e-Parliament in order to obtain information to pass on to her colleagues.



Michael Peart MP of Jamaica emphasised the importance of transmitting the information learned at this forum to the general public, and getting it onto the agenda of national Parliaments. He hoped to continue to work with the e-Parliament in the future.



Junior Minister Carlisle Powell of St Kitts and Nevis encouraged everyone in the room to promote the use of renewable energy, and pointed out that Nevis' success in geothermal is proof that being a small island need not be a hindrance. He promised to continue to ensure that every resident of St. Kitts & Nevis knows about Renewable Energy, and explained that he has already done over 50 interviews with media, and visited every school in Nevis to talk about wind and geothermal. Finally, he encouraged the MPs present to keep in touch with each other, and invited other participants to call him if they want information on Nevis.



Senator Pulcheria Teul of Belize promised to promote more open communication among MPs at a national and international level, and to advocate for capacity-building for MPs. She was concerned about how to reduce the negative impacts of development on communities, and highlighted the potential of renewable energy technologies as a tool in poverty-reduction – for example through installing solar panels in poor households. She also emphasised the importance of involving universities in research on these issues.



Dharamkumar Seeraj, MP of Guyana, was pleased to note that in Guyana work has already begun in promoting the use of Renewable Energy, and that therefore his task would be easier. For example, he cited the farming sector's use of renewable energy technologies for rice production.



Senator Hyacinth Bennett of Jamaica said that while she had initially been reluctant to attend the hearing, she was now a fully-fledged advocate for renewable energy. She promised to have serious discussions with the Energy Minister in Jamaica, who is already taking some steps towards increasing the use of renewable energy technologies. She also pledged to launch an initiative in schools to increase awareness of renewable energy and to encourage innovation in this area. Furthermore, she agreed to sit down with the Minister of Education and push to have renewable energy education included as an integral part of the school curriculum.



Picewell Forbes MP of the Bahamas pointed out that there is a vacuum of leadership on the issue of climate change and renewable energy in the Caribbean region. He explained that he plans to prepare a report to present to his Parliament, which he hoped would lead to a Select Committee Hearing on renewable energy. He also promised to try and gain support for a Private Member's Bill on promoting renewable energy technology, and to work to promote awareness in his constituency and training in technical institutes.



Minou Tarez Mirabal, MP of the Dominican Republic, emphasised the importance of these kinds of meetings in strengthening relationships between countries, and in strengthening mechanisms for coordinating policies throughout the region. She also pointed out that international connections between individual MPs can be more productive than relationships between national officials.



Pennelope Beckles, MP of Trinidad and Tobago, pledged to share the information learned at this hearing with other MPs and with NGOs. She also suggested that the e-Parliament includes site visits in its hearings, and enhances links with national Parliaments, allowing a greater access to information for all MPs.

Jean Beauvoir Dorsonne MP of Haiti, and Winston Murray MP, Odinga Lumumba MP and David Patterson MP of Guyana also attended the hearing.



4. About the e-Parliament and the World Future Council

The e-Parliament is a new global forum in which democratic national legislators work together to exchange and implement good policy ideas. It is led by an international Council of members of Parliament and Congress. We are combining new communications technologies with face-to-face meetings to apply at the global level some of the methods of a national Parliament. For more information on the e-Parliament please visit our website at www.e-parl.net.

The World Future Council (WFC) aims for a global membership of wise thinkers, practical pioneers and young leaders. It will identify the "implementation gaps" between current practices and necessary measures to assure a sustainable and equitable world. As an institution representing humanity's common values, the WFC will provide an ongoing forum for debate and action. For further information please see our website at www.worldfuturecouncil.org/.

5. Acknowledgement



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