



e-Parliament

World Future Council



Rewarding Renewables: Key Steps Towards Clean Energy

International parliamentary hearing
at the Alila Ubud Hotel, Ubud, Bali
15-16 December 2007

Summary report

The e-Parliament held an international parliamentary hearing on climate and energy immediately following the 2007 Conference of the Parties to the Climate Convention in Bali. The hearing focused on the question of: **"How can we as legislators promote a rapid shift to an economy which is powered increasingly by renewable energy?"**



An evening view from the Hearing location outside Ubud, in Bali.

Using the format of a parliamentary committee hearing, 22 national and regional legislators from 14 countries heard presentations from leading experts on energy policy. The expert presentations outlined the dangers of climate change, and the different policy measures that legislators can pursue in addressing those dangers and forming an effective policy response.

The parliamentarians posed detailed questions to the expert presenters regarding the most appropriate actions that they could promote in their specific national parliaments to accelerate the transition to a world economy powered by renewable energy. In the final session, various action ideas were assessed and discussed by the parliamentarians with a view to action in national parliaments and across borders, including possible all-party groups to promote specific renewable energy solutions such as Concentrated Solar Power.



e-Parliament Chair, Anders Wijkman, addressing the Hearing during the introductory session

1. Participants:

Members of Parliament:

Senator Lyn Allison, Australia, *Leader of Australian Democrats Party and Energy spokesperson.*

Kwame Ampofo MP, Ghana, *Member of the Energy Committee, Energy Consultant*

Ida Ayu Agung Mas, Indonesia, *Member of the Regional Representatives Council for Bali and a proponent of sustainable tourism.*

Rep. Teddy Casiño, Philippines, *leads advocacy on environment for Bayan Muna Party.*

Dr. Min-Jen Chen MP, Taiwan, *holds a Phd in Nuclear Engineering and is CEO of Macromicro Technology Co, USA.*

So-Yuk Choy MP, Hong Kong, *Chair, Legislative Council Panel, Environmental Affairs.*

Dorette Corbey MEP, Netherlands, *Member of Environment Committee, European Parliament, and Member of European Parliament Delegation to the COP*

Nathan Cullen MP, Canada, *New Democratic Party spokesperson on the Environment*
Nyimas Ena MP, Indonesia, *Member of the Representative Regional Council for Jambi province*

Barry Haase MP, Australia, *Member, Industry and Resources Committee*

Rebecca Harms MEP, Germany, *Vice-Chair, Group of the Greens/European Free Alliance; Vice Chair, Temporary Committee on Climate Change, European Parliament, and Member of European Parliament Delegation to the COP*

Marian Hobbs MP, New Zealand, *Former Minister for the Environment*

Anne-Grete Holmsgaard MP, Denmark, *Vice-Chair of the Energy Policy Committee.*

Michael Johnson MP, Australia, *Member of the House of Representatives for Ryan, Queensland.*

Eka Komariah MP, Indonesia, *Chair of the Budget and Finance Committee, Regional Representatives Council.*

Suresh Prabhu MP, India, *Member of the Lok Sabha, and Former Minister of Power*

J.D.Seelam MP, India, *Current First Vice-President, IPU Peace and International Security Committee, Asia Pacific Group.*

Nyoman Rudana MP, Indonesia, *Member, Regional Representatives Council for Bali.*

Rep. Lorenzo Tañada, Philippines, *one of the principal authors of the Philippines' renewable energy bill.*

Senator Panat Tasneeyanond, Thailand, *Chairman of the Committee on Environment*

Chiu-Chin Tien, Taiwan, *Member of the Legislative Yuan, involved in democracy and environmental protection movements for over 30 years*

Anders Wijkman MEP, Sweden, *Chair of the e-Parliament Council, and Member of the Environment Committee in the European Parliament, and the Temporary Committee on Climate Change.*

Expert Presenters:

Kirsty Hamilton, *Associate Fellow, Renewable Energy Finance-Policy Project, Chatham House, and United Kingdom Business Council*

Amy Kean, *Regional Manager, South East Asia and Pacific, Renewable Energy and Energy Efficiency Partnership (REEEP)*

Dr. Gerhard Knies, *Coordinator Trans-Mediterranean Renewable Energy Cooperation*

Philippe Lempp, *Renewable Energy Policy Network for the 21st century (REN21), and German Technical Cooperation (GTZ)*

Tri Mumpuni, *Executive Director, People Centred Economic and Business Institute (IBEKA)*

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

Additional Participants:

Andri Akbar, *Legal Specialist, Government Of Indonesia Delegation to the COP, and Legal Specialist for Carbon and Environmental Research Indonesia (CER Indonesia)*

Prasertsuk Chamornmarn, *Director, National Environment Board of Thailand, and acting Executive Director of Thailand Greenhouse Gas Organization*

Nicholas Dunlop, *Secretary General, e-Parliament*

Hilary Francis, *Programme Officer, Democracy Network, e-Parliament*

Sally Garden, *Programme Officer, Climate and Energy Network, e-Parliament*

Maja Göpel, *Campaign Manager, World Future Council*

Jesper Grolin, *Executive Director, e-Parliament*

Bianca Jagger, *Chair, Executive Committee World Future Council*

Benjamin Sovacool, *Research Fellow, Energy Governance Program at the National University of Singapore, and Adjunct Assistant Professor, Government and International Affairs Program, Virginia Tech*

Robert Turner, *Media and Communications Officer, World Future Council*

Dr. Natarika Vayuparb Cooper, *Senior Environmental Officer, Office of National Environment Board, Thailand*

2. Action ideas discussed

Each expert gave a detailed presentation highlighting at least one or two policies which legislators could promote in their national parliaments. Here are just some of the policy ideas which were discussed.



Delegates participating in the Hearing

The potential for solar thermal power plants in deserts and drylands

Dr. Gerhard Knies discussed in detail the potential for Concentrating Solar Power (CSP) to provide huge amounts of clean energy to countries around the world.

CSP uses mirrors to concentrate sunlight, heat water or other liquids in order to produce high-temperature steam that can drive turbines and thereby power conventional electricity generators. Among solar technologies, CSP is the cheapest, and also holds the potential of becoming the largest bulk producer of solar electricity. And because CSP uses a thermal phase, the energy generated can be stored. Energy can – according to Dr. Knies - be transmitted through modern high-voltage DC (HVDC) transmission lines in which only about 3% of the power is lost for each 1000 km. This makes it possible to transport energy generated through CSP across huge distances with very little loss of energy, thus creating the potential for CSP, generated in the deserts of North Africa, to be transported to Europe to meet growing energy demands, while preserving fossil fuels for future generations.

Dr. Knies emphasised the need to encourage energy production from a range renewable energy sources to provide well-balanced mix, and said that fluctuations in the production of wind, photovoltaic and hydropower electricity can be compensated by CSP, which can provide power on demand. CSP is potentially the largest renewable energy resource in many countries around the world – including in Southern Europe, North Africa, the Middle East, and Australia.

The required mix of CSP and other renewable technologies cannot be fully developed under current policy conditions, however. Dr. Knies argued that initial public start-up investment is needed, but not long-term subsidies (such as have been applied to fossil and nuclear energies) because the market shares of renewable energies will grow steadily and become cheaper due to learning and economies of scale.



From left: Suresh Prabhu MP (India), Dr. Gerhard Knies, and Rep. Teddy Casiño (Philippines) discuss Dr. Knies' presentation during the break.

The potential for importing CSP generated power into Europe from the North Africa/Middle East region is a focus of Dr. Knies' work, and the idea generated a lot of interest among the members of the European Parliament participating in the Hearing. Several European delegates expressed an interest in continuing discussions and dissemination of information about CSP in the European Parliament after the hearing. CSP also generated much interest among Parliamentarians from other parts of the world, including Indonesia, India and Australia.

Establish renewable energy feed-in tariffs

Stefan Schurig's presentation focused on the feed-in-tariff approach adopted in Germany, among other countries, to encourage investment in renewable energy. Feed-in-tariffs guarantee renewable energy producers a favourable and stable price for the electricity they feed into to the national grid.



Parliamentarians in session, from left: Barry Haase MP (Australia), Nyimas Ena MP (Indonesia), Nathan Cullen MP (Canada), Rep. Teddy Casino (Philippines), Ida Ayu Agung Mas MP (Indonesia), Dr. Kwame Ampofo MP (Ghana), and Senator Lyn Allison (Australia).

The economically attractive feed-in tariffs in Germany have resulted in a rapid build-up of the wind and solar power industries in that country and the same has been the case in other countries with feed-in tariffs such as Denmark. The text of the German law is available in a number of languages (contact info@e-parl.net), and the law has already inspired similar initiatives in other countries. The World Future Council also provides more detailed information on feed-in legislation (www.worldfuturecouncil.org), and has created an internet portal for climate protection laws (PACT).

Increase funding for Research and Development

Several expert presenters emphasised the need for more funds to be allocated to Research and Development (R&D) in the renewables field. Several parliamentarians voiced their frustration at the huge amount of funds going to R&D in the nuclear sector, while renewable technologies receive very little such funding. R&D and technical training for clean energy need to receive far greater support from governments in both the South and the North. Since parliamentarians approve national budgets, they have many opportunities to press for more resources in these areas.



Coffee break discussion: Anne-Grete Holmsgaard MP (Denmark) and Senator Lyn Allison (Australia).

Attract finance to the Renewable Energy Sector

During her presentation, Kirsty Hamilton emphasised the role of Government in attracting finance to the renewable energy sector. She highlighted the importance of integrating renewable technologies into wider energy policy, and encouraged delegates to look at renewable energy in an investment context and create a policy environment that is attractive to private sector investors. Policy stability is extremely important in order to encourage investment. Investors require a predictable regulatory framework which minimizes risks and ensures a fair return on their investment.

Kirsty Hamilton used the phrase 'Loud, Long and Legal' to illustrate the policy environment that parliamentarians should create in order to encourage private investment in renewables. Loud because measures need to be noticeable on the bottom line and make a measurable business difference; Long because they must have a duration that match the long-term nature of the investments that are being made; and Legal because the measures need the stability of legal mechanisms and a structure that will reduce the perception of regulatory risk. Investors themselves will not take the lead in developing renewables, it is up to parliamentarians and governments to create a robust policy environment that provides clear incentives for investment in renewable technologies.

There was a great deal of interest among the parliamentarians regarding how best to create such a policy environment in their own countries. In response, Kirsty emphasised the need to act on a case-by-case basis, and to very clearly identify the particular issues involved in each case before proceeding.



Discussion, from left: Michael Johnson MP (Australia), Marian Hobbs MP (New Zealand), Anne-Grete Holmsgaard MP (Denmark), Nicholas Dunlop, Chiu-Chin Tien MP (Taiwan).

Provide renewable energy to off-grid rural areas

Providing energy to off-grid rural communities can help to significantly reduce poverty, and to encourage development. Tri Mumpuni emphasised the importance of community ownership if rural electrification schemes are to be successful. Raising local equity, encouraging local participation in the electrification project, as well as utilising local wisdom and respecting local political and cultures can all help to ensure that such projects are successful and have maximum impact on the development of a community. Tri Mumpuni highlighted the importance of ensuring before beginning a project that there is sufficient interest within a particular community for an off-grid electrification project to take place. The Parliamentarians heard about the success which Tri Mumpuni and IBEKA have had in electrifying rural communities around Indonesia through off-grid micro-hydro systems. Tri Mumpuni works closely with local communities to ensure that

the projects are sustainable in the long term, and that electrification will have maximum impact on the development of the communities.

There was a great deal of interest among the parliamentarians regarding IBEKA's electrification projects, and the Indonesian delegates expressed a desire to support IBEKA's projects, asking her to make a presentation to the Indonesian Parliament.



Tri Mumpuni addressing the delegates. In the background, from left to right: Nathan Cullen MP (Canada), Rep. Teddy Casiño (Philippines), Rep. Lorenzo Tañada (Philippines), Jesper Grolin, Rebecca Harms MEP (Germany), Amy Kean, Maja Göpel.

Raise awareness among parliamentarians and citizens

The point was raised time and again by participating legislators that increasing public awareness of the threat of climate change, as well as the many opportunities for shifting to sustainable energy, is vital. Although awareness about the issue is slowly increasing, it is still not a crucial, deciding issue in parliamentary elections. It is necessary to raise the public consciousness on the issue of climate and renewable energy solutions so that governments and parliamentarians are compelled to act. Unless the opinion polls reflect a public concern for the issue, it will continue to be dealt with inadequately on a policy level. Parliamentarians can help to educate their colleagues and their constituents about this issue, and should be encouraged to do so.

Keep parliamentarians in touch with each other

The participating parliamentarians expressed a keen interest in maintaining contact with each other following the Hearing, and in establishing contact with other colleagues around the world who are interested in, and working on, similar issues in their own parliaments. Delegates agreed that the e-Parliament should help to keep them in touch through the website, an electronic newsletter, and occasional conference calls and/or meetings to allow them to learn from each other's experience as they move ahead.

3. Follow-up Actions

During the final session of the hearing, participating Members of Parliament discussed a range of concrete actions that they would like to pursue within the coming months, after they return to their respective parliaments. There were a wide range of actions discussed in this session, and the e-Parliament Secretariat will work with the participants to assist with the realisation of these action proposals.

Several participants expressed a strong interest in bringing various presenters from the Hearing to their own parliaments to speak with their colleagues about the issues discussed, to try and increase awareness around the climate and energy issue. A number of participants from different countries committed to organising cross-party interest groups focused on various issues discussed at the Hearing, including CSP power, feed-in tariffs, photovoltaics, and off-grid electrification. One participant also expressed an interest in setting up a Senate enquiry into emissions trading. Several Members also expressed a desire to introduce debate around the mechanisms discussed at the Hearing at the Committee level, in order to force issues such as carbon pricing into Committee discussions.

e-Parliament and World Future Council staff will continue to work with the Members of Parliament present at the Hearing to assist them in realising these actions.