## **Renewable Energies – The Challenge for the 21<sup>st</sup> Century**

# Resolution for the International Parliamentary Forum on Renewable Energies Bonn, 2 June 2004 (adopted on 2 June 2004)

The International Parliamentary Forum on Renewable Energies in Bonn on 2 June 2004,

- hosted by the German Bundestag in association with the International Conference for Renewable Energies (Renewables 2004), held in Bonn from 1-4 June 2004,
- supported by the Inter-Parliamentary Union (IPU),

### Proceeding from

- the Declaration on the Human Environment adopted by the United Nations Conference on the Human Environment in Stockholm in 1972, which defined the global conservation of natural resources as a task for all humankind,
- the Convention on Long-range Transboundary Air Pollution of 1979 and its 1988, 1991 and 1994 protocols,
- the Vienna Convention for the Protection of the Ozone Layer of 1985 and the Montreal Protocol of 1987,
- the United Nations Framework Convention on Climate Change (UNFCCC) of 1992,

- the Rio Declaration on Environment and Development of 1992, which described environmental protection and economic development as an interdependent and indivisible challenge,
- the Millennium Declaration adopted by the United Nations General Assembly and the Montevideo Programme III of 2000/2001, which defined economic development based on environmental protection and the conservation of natural resources as a central task for the 21<sup>st</sup> century,
- the Johannesburg Declaration of 2002, which underlined the central importance of renewable energies for sustainable development and urged the international community to pursue more intensive initiatives; and the Parliamentary Declaration on the occasion of the World Summit on Sustainable Development,
- the Intergovernmental Panel on Climate Change (IPCC), which has calculated that reducing greenhouse gases by 60 percent by 2050 is essential to protect the global climate,
- the Inter-Parliamentary Conference on Global Environment, held in Washington in May 1990, which underlined the key importance of renewable energies for policy strategies on climate, resource and environmental protection,
- the resolution on the Kyoto Protocol adopted by the 107<sup>th</sup> Inter-Parliamentary Conference (IPU) in Marrakesh on 22 March 2002, which called on States to boost their use of renewable energies and increase energy efficiency, *inter alia* in the transport sector,

has, with the participation of 310 parliamentarians from 67 countries, adopted the following resolution:

#### Noting that

- A secure and adequate energy supply is vital for all human persons and their societies,
- The development of the industrial societies is due *inter alia* to the availability of cost-effective energy capacities and productive energy conversion technologies,
- The energy supply for the world's growing population is currently achieved primarily through the use of fossil energies,
- More than one-third of humankind currently has no access to flexible secondary energy, i.e. electricity, *inter alia* because they do not have an adequate grid infrastructure,
- The use of non-commercial biomass, which is not based on constant recultivation, leads to the erosion of vegetation areas and increases the threats to the climate,
- There are highly divergent and conflicting views on the use of nuclear energy, with some sides emphasizing the benefits of CO2-free electricity generation, whereas others highlight the risks of nuclear accidents, the long-lasting problems associated with the disposal of nuclear waste, and the threats posed by nuclear weapons proliferation,
- The burning of fossil energies has produced far-reaching negative impacts on global climate, with profound social and economic consequences in addition to the associated risks to human health,
- Conventional fossil energy sources are becoming depleted in the 21<sup>st</sup> century, while the exploitation of non-conventional fossil energy sources such as oil

sands would result in significant cost increases as well as major additional environmental pollution,

- The energy-import dependence of countries without adequate conventional energy resources of their own is increasing, and may be a source of international tension and conflicts in the future,
- The high water consumption associated with conventional energy systems and the ensuing water pollution exacerbate water supply problems in many regions of the world,
- As regards the utilization of the potential afforded by renewables, only hydropower – combined with the construction of reservoirs and dams – and biomass, which is generally not used sustainably, currently make a substantial contribution to the world's energy supply,
- The task of providing political support for research into and the development and market launch of renewables has so far been neglected worldwide,
- In the countries and regions in which two billion people survive without a connection to an electricity grid, the off-grid opportunities afforded by renewables already enable electricity to be supplied at the same or lower costs compared with conventional energies,
- In view of the anticipated shortages and ensuing price increases in the oil markets, the mobilization of bio-fuels in the transport sector is of urgent and key importance for a growing number of countries,
- The opportunities afforded by energy-saving and increased energy efficiency are complementary to the mobilization of renewables and radically reduce the need for replacement through renewables use,

In view of the opportunities afforded by renewables (in the form of solar radiation, biomass, wind power, hydropower, marine energies and geothermal energy), which

- Offer a comprehensive and inexhaustible energy potential which could satisfy all of humankind's energy needs in the long term, whereby it is necessary to reduce the costs of renewables substantially,
- Are emission-free or, in the case of sustainable biomass use, are emissionneutral, enabling the climate and environmental problems associated with conventional energy to be overcome on a permanent basis;
- Can be used in a way which makes sparing and responsible use of water resources;
- Offer a domestic energy potential for every country around the globe, thereby overcoming import dependence and guaranteeing energy security on a permanent basis;
- Offer opportunities for decentralized applications, thus opening up new regional, communal and local scope for economic development, autonomous environmental protection and conservation of natural resources, and facilitate the development of an energy supply without extensive and costly grid infrastructures;
- Due to the potential of biomass, can revitalize the agriculture and forestry sectors in all countries and create new opportunities for rural development,
- And, for these reasons, can make a major contribution to overcoming economic disparities in many countries and in the global economy,

#### Considering that

- The natural potential of renewables around the globe is inexhaustible, exceeding annual fossil and nuclear energy consumption many thousand-fold,
- That the current technological potential for renewables use would allow conventional energies to be replaced in full across the entire range of energy needs;
- That the economic potential of renewables will steadily become more costeffective and therefore more widely available in the wake of further technological development and the shift to the mass production of application technologies, while the costs of conventional energies will increase due to their ongoing depletion and the environmental pollution they cause, and that already, especially in regions with no grid-based supply, renewables can be used without generating additional costs, thus improving the scope to replace conventional energies with renewables;
- That measures to introduce renewables, enhance efficiency and save energy must take place within a political, strategic and economic framework;
- That a sustainable, i.e. permanent, energy supply which conserves resources and protects the environment and the earth's atmosphere requires a fundamental policy shift towards renewables;
- That the technical potential for renewables use can be expanded substantially through research into and development of conversion, application and storage technologies and materials,
- That there is a major discrepancy between the genuine potential of renewables and the process leading to its realization,

- That in policy strategies directed towards the introduction of renewables, not only the actual investment costs but also the macropolitical and macroeconomic benefits and the avoided damage to environment and health must be considered as key factors,
- That there are now successful examples of the market launch of technologies for renewables use, based on political initiatives,
- That successful steps to mobilize new renewable energies at national and communal level have been initiated by parliaments,
- That renewables are the bearers of hope for a long-term, sustainable, secure and environmentally compatible energy supply for everyone,
- That in every country of the world, there is a mix of different energy carriers, and that progress towards the expansion of renewables must be achieved through a steady increase in their share of the energy supply,
- That strategies geared towards the mobilization of renewables and the replacement of conventional energies cannot follow a uniform pattern due to the divergent starting conditions and energy supply priorities, as well as the divergent natural potential for renewables use, in every country of the world,

The International Parliamentary Forum on Renewable Energies makes the following recommendations:

 The International Conference for Renewable Energies, held from 1-4 June 2004, and the International Parliamentary Forum on Renewable Energies, held on June 2, 2004, should not be one-off events. They should be held at regular intervals, motivate participants to engage in more intensive uni- and multilateral efforts and encourage greater international cooperation, especially on international technology transfer in the field of renewable energies and energy efficiency, and ensure the necessary follow-up and periodical assessment of developments after the Conference and the Forum; in order to consider the perspective and needs of future generation in particular, all future international conferences related to energy should include an international youth meeting. The overall aim should be to facilitate a broad-based exchange of experience on successful best policy strategies, thus providing fresh impetus both for policy-making at national level and for international cooperation and action, including the implementation and further development of the Kyoto Protocol, in particular by encouraging countries that have not yet ratified the Protocol to do so, and providing renewed momentum for international development assistance, and also addressing the many new issues relating to the funding of sustainable energy strategies.

- 2. Governments are called upon to work within the framework of the negotiations on the 1992 United Nations Framework Convention on Climate Change and the 1997 Kyoto Protocol to ensure that full account is taken of CO2 emission values along the entire energy supply chain. Measures to promote renewables are an important element in the framework of the use of all the insturments of both the implementation of the Kyoto Protocol and long-term climate protection policy, in order to stabilize greenhouse gas concentrations at a non-hazardous level in accordance with the objectives of the Framework Convention.
- Governments are urged to stop using the Kyoto Protocol target as a pretext to expand nuclear power, and are urged to set gradually increasing renewable energies targets for the future.
- 4. The policy shift towards renewables and increased energy efficiency must be a key political priority in the interests of environmental protection and the conservation of natural resources, the associated opportunities for economic development, energy security, poverty reduction worldwide, and the avoidance

of economic crises and resource conflicts. Achieving this priority will require numerous legislative initiatives in order to develop renewable energies to their full potential. Parliaments are the democratic driving force in this process.

- 5. The legal framework for the promotion of renewables, energy efficiency and energy-saving will encompass many policy areas and thus entail a wide range of legislative initiatives in the following fields: education, research and development, training, health, agriculture, transport, international development, and poverty reduction under decentralized authority. The IPF recommends that Governments use financial resources in the field of energy research with a priority on renewable energies.
- 6. The key political reasons for promoting a strategy to mobilize renewable energies are their numerous benefits for future economic, environmental and social development in all countries of the world: the avoidance of damage to the climate, environment and health, overcoming energy dependence, the positive impact on national economies' balance of payments, creation of permanent jobs at local level, especially in the trades, agriculture, aquaculture and forestry, and opening up new opportunities for industrial development in a wide range of sectors, notably power station technology and engineering, electrotechnology, construction and transport.
- 7. Promoting renewables requires new institutional measures in the field of international cooperation. To facilitate technology transfer on renewables and energy efficiency and to develop and promote policy strategies, the most important institutional measure is to establish an International Renewable Energy Agency (IREA), which should be set up as an international intergovernmental organization. Membership would be voluntary, and all governments should have the opportunity to join at any time. The Agency's primary tasks would be to advise governments and international organizations on the development of policy and funding strategies for renewables use, to

promote international non-commercial technology transfer, and to provide training and development. It would also be responsible for information and communications on renewables at international level, as well as certification and standardization in the field of renewables technology. The IPF recommends a renewable energies technology transfer to promote the dissemination of noncommercial renewable energies technologies.

- 8. Motives to promote renewables can be drawn from all the political schools of thought. This offers the opportunity to develop policy strategies which transcend traditional party-political and ideological differences. The formation of cross-party working groups in the parliaments, as is customary in some parliaments, can serve as a model here.
- 9. An ongoing exchange of information between parliaments on new legislative initiatives and practical experiences can play a key role in overcoming political differences and identifying solutions to conflicts of interest, in evaluating political experiences and providing fresh impetus to mutual benefit. This exchange of experience should take place with the support of the international parliamentary organizations, the e-Parliament, the Parliamentary Network of the World Council for Renewable Energy, the European Forum for Renewable Energy Sources (EUFORES), Globe, Parliamentarians for Global Action (PGA), and others.
- 10. The national and international development banks are called upon to reinforce and expand their credit programmes for renewables, especially in the area of microcredits. The international development banks are called upon to follow the recommendations of the "Extractive Industries Review" of Emil Salim. The governments are called upon to place the promotion of renewables at the heart of their development strategies.

- 11. The United Nations' specialized agencies and programmes (FAO, UNESCO, UNIDO, WHO, UNDP, UNEP) are urged to focus to a greater extent on renewables and in a more comprehensive way when developing their strategies and implementing their programmes of action, and to launch appropriate initiatives.
- 12. In the interests of promoting technology transfer and interoperability and achieving a swift increase in the productivity of renewables and efficiency technologies, we call on the governments to launch initiatives to develop global industry norms and standards. This will also assist the developing countries to develop their own industrial strategies aimed at producing the new energy technologies in their own countries in order to avoid new inequalities, thus opening up opportunities for South-North or South-South trade, alongside North-South trade.
- 13. The governments are called upon to work within the framework of the forthcoming WTO negotiations to ensure that in the international economy, technologies for renewables use and energy efficiency can be traded with no or low tariffs.
- 14. We, the parliamentarians of this International Parliamentary Forum on Renewable Energies, commit to seek to enforce the considerations and recommendations of this resolution in our respective countries. We commit to seek the approval of this resolution in our respective parliaments in order to use the large potential of Renewables energies to tackle the challenges humankind is facing.