

Declaration of *RIO 02*

The participants at *RIO 02* – World Climate & Energy Event

11th of January 2002, Rio de Janeiro, BRAZIL

www.rio02.org

The international delegates at *RIO 02* - World Climate and Energy Event agreed on the following resolutions:

- 1. That national and state governments adopt energy saving, production, distribution and financing policies that will, within 50 years, encourage the complete migration from traditional carbon-based fuels to renewable, non-polluting energy sources, especially wind, solar and biomass.**
- 2. Further, that they adopt technical standards that accelerate the commercialization of fuel cells as a replacement for internal combustion engines;**
- 3. Further, that those governments establish procurement policies, effective immediately, that ensure that all new government facilities and vehicles incorporate the use of renewable fuels and the most advanced pollution reduction equipment; And, that the necessary legislation and regulation to accomplish these goals be implemented within three years.**

During the conference, participants heard examples of successful government policies that promoted renewable energy use in Europe in ways that were both technically feasible and economically viable. All participants agreed that similar policies should be implemented world-wide. The social, economic and environmental benefits of adopting renewable energy sources are so extensive and so compelling that the Conference participants believe that the evolution of energy generation to renewable and non-polluting sources should be a matter of the highest possible priority for every national and state government.

Appendix:

Based on the presentations and discussions at the *RIO 02* - World Climate Event, the following additional observations and recommendations were made for consideration at the Johannesburg Summit in late 2002:

1. The object of the treaties signed at the UN Conference on Environment & Development (RIO 92) have not been fully achieved. The goal of reducing greenhouse emissions to their 1990 levels in developed countries by the year 2000 was not reached. In fact, action was postponed to 2008-2012 (as suggested in the Kyoto Protocol of 1997).
2. The participants at *RIO 02* observed that the developing countries have many pressing social problems which have worsened along with the deterioration of the environment. The expanded use of renewable energy technologies could generate a great number of jobs and help to solve several of the problems that have increased in the past ten years. Two concrete examples are the Brazilian alcohol program and the urban waste usage as a source of energy, both of which have a great potential for the generation of employment, e.g. for countries like Brazil.
3. Today's usage of alternative and renewable energy sources is far less than the total potential according to scientific and economic evaluations. There is currently an underutilization of alternative sources of energy, notably solar thermal energy for water heating in residences, PV energy in isolated communities and wind power. However, some European countries have achieved accelerated growth in wind energy production. For example, immediately after legislation was adopted, to create financial incentives for the production of wind energy in Germany, the market exploded from 20 MW, twelve years ago, to 8000 MW today. It should be noted that, at the time of the passage of that legislation, Germany and Brazil had the same installed capacity of wind generators, and, while Germany has seen incredible new investment, the production of wind energy in Brazil has grown only to 20 MW, even though the country is believed to have a wind energy generation capacity of 140 000 MW.
4. *RIO 02* identified other promising activities: means for more efficient energy use, bio-climatic architecture in the urban environment, training for the management of technological projects in public and private companies. Important tools for addressing those issues include clean development mechanism (CDM) from the Kyoto Protocol, and its local component, the RIO Clean Development Program, started in 1999 by the State government.
5. The possibility of using bio-diesel along with alcohol on a small scale is growing in Brazil, especially with the initiative announced on the final day of the *RIO 02* event by the Secretary of Agriculture for the State of Rio de Janeiro. That announcement included the promotion of

oleaginous crops; the extraction, production and marketing of bio-diesel fuel; the intensive usage of clean technologies, locally developed to connect the public, private and academic sectors.

6. There are obstacles to the implementation of the technologies identified above.
 - Existing political and industrial vested interests are often not in favour of change, of any kind. In a market economy, the resistance is most often based on price – a problem that can be successfully addressed through subsidies at the production or the consumer level.
 - Lack of technical knowledge of the potential of renewables can hinder government planning. This could be addressed by placing a stronger emphasis on training at school and university level, as well as the promotion of further events such as *RIO 02*.
 - Import duties and taxes often discourage the adoption of the most up-to-date technology and production equipment.
 - Even when governments do adopt the proper policies, they often fail to establish all the necessary regulations in a timely fashion. In Brazil, for example, there is a need for the immediate implementation of Proeolica Program and an extension of the original timeframe.

Full details of the presentations at the *RIO 02* World Climate & Energy Event can be found in the “Proceedings of *RIO 02*” and at <http://www.rio02.org> or at <http://www.rio02.com>.