



ICTP Experts Meeting on 'Science and Renewable Energy'

15-18 January 2007, Adriatico, Miramare, Trieste, Italy

Meeting Report

The Director General of International Centre for Theoretical Physics (ICTP), Professor K R Sreenivasan and the Chairman of World Renewable Energy Congress, Director General of (WREN), Professor Ali Sayigh, with the help and coordination of Assistant Director of ICTP, Professor C Tuniz, Professor G Furlan and Professor D Nobili organized the above meeting with following aims:

1) To assess the progress and to update information concerning various renewable energy (RE) disciplines, research and technology.

2) To identify leading RE experts and researchers around the world.

3) To highlight recent achievements in use of RE in Europe and the United States.

4) To identify the problems and reasons why the Italian RE programme is not as effective as those of some other European countries.

5) To establish policies and recommendations to help Italy and other countries to successfully promote and establish continuous activities in RE.

6) To engage ICTP/WREC to hold seminars/symposiums at ICTP on a regular basis with the aim of focusing on topics of interest to different communities and, if possible, to hold meetings in different countries.

31 RE experts took part in the above meeting from the following countries: Italy, UK, USA, Germany, Austria, Nigeria, Malaysia, India, Brazil, Chile, Thailand, Cuba, Ethiopia and Sri Lanka.

Reports were given on the latest achievements in RE research and



The first ICTP / WREN meeting



Dr L Kazmerski, Ms P Guardabassi, Prof D Nobili, Prof G Furlan, Prof K R Sreenivasan and Prof A Sayigh

development as well as national RE activities.

On the last day a full discussion was held in the presence of ICTP Director, Prof Sreenivasan and the following Declaration was agreed.

ADRIATICO DECLARATION

We, scientists and specialists on renewable energy, meeting under the auspices of the International Centre for Theoretical Physics (ICTP) and the World Renewable Energy Network (WREN) declare our intention to create a new partnership to promote education, research and innovation in the provision and use of renewable energy technologies.

Both our organizations are well-established networks of specialists with particularly strong links between developing and developed countries. For all of them the threats of energy shortage and a environmental degradation are severe. Those of us attending this meeting view with the greatest concern the absence or failure of effective policies and measures to promote and accelerate economic and social development by a rapidly increasing share of renewable energies and thus to achieve sustainable progress instead of causing further and faster deterioration in the environment around us including accelerated global warming. We share the concern that over 2.5 billion people still rely on traditional biomass, that over 1.6 billion people still exist without electricity and that current development patterns perpetuate the rapid growth of fossil fuel use and its associated greenhouse emissions. We note that, despite the huge potential in harnessing energy from renewable sources (especially great for different forms of solar and marine and substantially in the near term for modern biomass, wind, geothermal and small hydro), new renewable energy resources (excluding large hydro and traditional biomass-use) still account for only 2.5 % of world primary energy use.

Our organizations, their members and associates, can do little to improve the quality or raise the speed of effective policy making and decision taking. But



25 Scientists and Experts were present at the opening of the meeting

we do believe that the nature of our two organizations, their memberships and associates, together with other collaborating institutions at international, regional and national levels can make an effective contribution - drawing on our acknowledged roles and experience in education, research and innovation to:

- raising awareness at all levels in our societies and among decision makers of the real nature of the challenges we face in social and economic development, environmental threats from the local to the global, the urgency with which these challenges and threats must be met and the strongly increasing roles which renewable energy sources and technologies could and should play in meeting them;
- raising awareness about the opportunities of different forms of renewable energies to meet before the end of this century – a major part of the energy needs in the developed and in the developing world, especially by combining sustainable use and exploitation of renewable energy sources with more efficient technologies;
- providing education and information relevant to these challenges and threats, and the huge and inexhaustible potential for renewable energy sources;
- drawing on the experience and

knowledge within our two organizations, to inform others of those policy frameworks, measures, administrative institutions, technologies, partnerships and financial mechanisms most likely to promote and accelerate the successful use of renewable energy (while avoiding the presumption that one size fits all);

- encourage the development of markets in renewable energy RD & D, innovative financial mechanisms, and the exploitation of cost reduction opportunities;
- promote private-public-partnership to accelerate the penetration and use of those renewable energy technologies best suited to local conditions, including both those with early realisable potential (such as onshore wind, modern biomass and solar collectors) as well as the more distant, but huge potential of photovoltaic, concentrating solar power, offshore wind and ocean thermal (always taking into account the need for efficient long-distance transmission for most of these technologies);
- promote better and more effective communication between institutions, businesses and individuals active in the promotion and deployment of renewable energy;
- expand innovative and effective programmes, conferences, seminars,

lectures, research exchange related to renewable energy;

- where appropriate and feasible, to collaborate with other ongoing initiatives and institutions (eg G8 initiatives; UNESCO, ISESCO, UNDP, UNEP, REN21 and other institutions), in order to accelerate the effective use of renewable energy.

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