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When submitting articles please send in ASCII text or RTF format with hard copy. All illustrations / photographs welcome.

## World Renewable Energy Congress – VII, Cologne, GERMANY, 29 June – 5 July, 2002

It has taken two years of hard work in the Congress office, and continual effort on the part of 73 members of the Technical Committees, and 650 members of the International Steering Committee, who are also members of the World Renewable Energy Council, to achieve a most rewarding and well-structured Congress programme for Cologne. This is in addition to all the hard work and continuous meetings of our German colleagues in this event.

We received 1168 abstracts, 938 were selected to appear in the volume of abstracts. From these the Technical Committees reviewed and refereed over 600 papers for presentation on 10 different topics, including the more recent topics of fuel cells and energy, gender and poverty reduction. These papers are published in the Proceedings of the Congress. Contributions have come in from 106 countries and it is expected that participants from 130 countries will take part.

The Programme, which is on the website <http://www.wrec.de>, is divided into three parts:

- The Plenary Sessions will be held on Monday and includes the opening ceremony, and will continue on Tuesday, Wednesday and Thursday mornings up to the coffee, and one Friday which will include the summing up and closing ceremony.

- The Technical Sessions which will run in 10 parallel sessions throughout the remainder of Tuesday, Wednesday and Thursday.

- The Poster Sessions will be on Tuesday and Wednesday from 12:00 to 14:00 hrs.

On **Saturday** the WREC Council and Network will meet in the **Dorint Hotel, Friesenstr. 44-48, 50670 Cologne, Tel: 0221 16140**. A full programme has been prepared and includes two coffee breaks and lunch for members. Please see the programme on the website. In the evening members of WREN and official guests are invited to dinner.

On **Sunday**, we start with a 3 mile race from the DOM hotel, followed by various workshops at the Cologne Congress Centrum Ost, on solar air conditioning and refrigeration, and Euro/Australian cooperation.

Official registration opens at 16:00 hrs at the Congress Centrum Ost and at 19:30 a reception

hosted by the Mayor of Cologne will take place at the Civic Centre near the Cathedral.

The Congress Banquet will be held on a Rhine river-boat on Wednesday. On this occasion the Outstanding Scientist and Pioneers awards will be presented.

Several technical visits have been planned for Friday afternoon.

Accompanied persons can enjoy the social and tourist programmes which have been arranged by local organisers during the Congress period.

From Monday to Wednesday and parallel to the Congress a large exhibition will take place at the Congress Centrum where more than 100 exhibitors will show their products and inventions.

*Come and join us and see for yourself the World of Renewable Energy in Cologne.*



*Some members of Biomass Committee: Dr Keith Richards, Prof Ali Sayigh and Dr Jim Coombs in one of their meetings.*



*The main feature of Cologne – The Domo which took 400 years to build*

*Heads of some of the technical committees with their German counter parts at the Association of Electricity Producers office in London. From left standing: Ms. Sarah Merrick, Mr. Fred Treble, Dr. Bernhard Krahl Urban, Dr.*



*Robert Critoph, Mr. David Millborow, Dr. Jim Coombs, Prof. Ali Sayigh. From left sitting: Mr. Michael Jefferson, Prof. David Elliott, Prof. Richard Wagner and Ms. Erica.*

*Some of the Photovoltaic Technical Committee: Prof. Helmut F O Mueller, Mr. Jonathan Bates, Dr. AbuBakr S. Bahaj, and Mr. Fred Treble*



*New Era between the International Solar Energy Society and the World Renewable Energy Council / Network. During the Adelaide Conference, Mr. Keith Lovegrove – chairman of Australian and New Zealand Solar Energy*



*Society, Dr. David Mills – Past ISES Chairman, Prof. Anne Grete Hestnes – Present Chairperson of ISES, Prof. Ali Sayigh – Chairman of WREC and Director General of WREN and Dr. Cesare Silvi – Outgoing chairman of ISES agreed to cooperate to promote renewable energy in a very effective way.*

*WREN is teaming with ANZSES to run the Melbourne Regional World Renewable Energy Congress either late 2003 or early 2004.*

*Some of the Solar Thermal Technical Committee members at the University of Warwick: Prof. Kamaruzzaman Sopian – visitor from Malaysia, Prof. Phil Eames, Dr. Robert Critoph and Prof. Ali Sayigh.*



*The magnificent close-up of the Domo in Cologne*



## OBITUARY

Since our last Congress the world of renewable energy has lost three of its most enthusiastic members. Each one of them was a tower of strength to their colleagues at home and on the international scene. They were dedicated to the dual cause of the clean environment and the use of renewable energy.

### Professor Abdul Baqi Ma'afi

I first met Professor Abdul Baqi Ma'afi when he was working for his doctorate and was present at his Ph.D viva in Algeria in 1988. He had been involved in renewable energy research since 1982 and ran an active team in the electronics department in the University of Algiers until his untimely death in a road accident in November 2001. He was a pioneer of solar energy research in Algeria and published many papers as well as encouraging other scientists to join the field. Our thoughts and condolences are extended to his wife and daughters, and his colleagues.

### Professor the Honourable Oliver Headley

Professor the Honourable Oliver Headley died in his sleep in April 2002. He was the founder of the Caribbean Solar Energy Society, and a WREN Pioneer. For his outstanding contribution in solar thermal applications, the use of photovoltaics in the Caribbean and his global promotion of environmental issues, Oliver received many national and international awards. He was very actively involved in promoting renewables and attended all our congresses and seminars. We will all miss his enthusiasm and friendship. Our condolences go to his wife, family and colleagues.



### Reverend Joe Leckie

The Reverend Joe Leckie was truly a voice from heaven as all colleagues who have attended our previous congresses will agree. He was a tireless defender of the clean environment and promoter of renewable energy: and he practiced what he preached - his house in Caddam had solar water heaters and PV panels. He wrote numerous articles and letters in both religious and scientific forums and believed that sustainable energy was a benefit to be shared by all mankind. We were proud to have him attend all our meetings as a member of our network. He died after a short illness in March 2002. We will all miss his happy and enthusiastic presence in Cologne this year. We send our thoughts and condolences to his wife and family.

# WREN – Iran Solar Energy Society Regional Symposium on Rationalization of Electricity Use in Iran.

Tehran, IRAN, 5-6 March, 2002.

WREN, with the help of the Commercial attaché of the British Embassy in Iran and the DTI headed a mission of 4 experts to the Symposium.

They were:

Dr. Robert Critoph – Warwick University.  
 Dr. Vahid Tabatabai – Thermomax  
 Dr. Rafal Lewicki – Envirosaspinwall  
 Prof. Ali Sayigh – Chairman of WREC/  
 Director General of WREN

Two additional members of WREN joined the team later:

Prof. Dr. Nasir El Bassam - Director, International Centre for Renewable Energy (IFEED) - Dedelstorf, Germany  
 Dr. Kamaruzzaman Sopian - Dept. of Mechanical Eng. Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia.

The Symposium was opened by the Minister of Oil and Energy and attended by more than 1000 scientists and engineers. An exhibition was held parallel to the Symposium where 20 exhibitors showed their products.

The Organizer of this Symposium was Dr. A Kaabi Nejadian, President of the Iranian Solar Energy Society and Ministry of Energy – Office of the Deputy Minister of Energy. It was sponsored by the Iranian Fuel Consumption Optimizing Organization and its building department which is managed by Mr. S Sattari and his colleague, head of the commercial building department, Mr. M Khalili.

This was the most effective and useful symposium where several cooperative programmes are likely to be developed by both sides. Our thanks to all those who

*Center for Renewable Energy Research and Applications Exhibition at the Symposium which was manned by Mrs Meryem Daryabegy. In the picture: Mrs Taleghani, Dr Assadi, Dr Critoph and Mr Sani.*



made it possible and a special thanks to Mr. Hashimi – Chairman of the Iranian Fuel Consumption Optimizing Organization, Eng. Hamid Chit-chian, Deputy Minister for Energy Affairs, and Dr. Morteza Khalaji Assadi, Atomic Energy Organization of Iran, Center for renewable Energy Research and Application. Our thanks to all the participants and contributors who made this Symposium so successful.



*A photograph with some of the women participants at the Symposium among them Dr Nahid Sheikhestani, a member of the Iran Solar Energy Society Executive Committee.*

*A meeting with His Excellency Mr. Hashemi, Chairman of the Iranian Fuel Consumption Optimizing Organization. From the left: Mr. Khalili, Dr. Tabatabai, Prof. El-Bassam, Prof. Sayigh, His Excellency Mr. Hashemi, Dr. Lewicki, Dr. Critoph, Mr. Sattari and Prof. Sopian.*



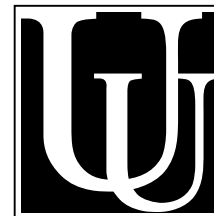
## World Cell or Module Production in MW\* by end of 2001

COUNTRY	1993	1994	1995	1996	1997	1998	1999	2000	2001
USA	22.44	25.64	34.75	38.85	51.00	53.70	60.80	78.50	100.32
JAPAN	16.70	16.50	16.40	21.20	35.00	49.00	80.00	116.70	171.22
EUROPE	16.55	21.70	20.10	18.80	30.40	33.50	40.00	58.50	86.38
Rest of the WORLD	4.40	5.60	6.35	9.75	9.40	18.70	20.50	24.20	32.62
<b>TOTAL</b>	<b>60.09</b>	<b>69.44</b>	<b>77.60</b>	<b>88.60</b>	<b>125.80</b>	<b>154.90</b>	<b>201.30</b>	<b>277.90</b>	<b>390.54</b>

\* PV News Vol.21, No. 4, April 2002

## Wind Energy Installation by beginning of 2002- MW

Region of the World	Beginning 2001	Beginning 2002	% Increase
<b>Europe</b>	<b>12,972</b>	<b>17,361</b>	<b>33.83</b>
<b>North America</b>			
USA	2555	4245	66.14
CANADA	140	207	47.86
<b>TOTAL</b>	<b>2695</b>	<b>4452</b>	<b>65.20</b>
<b>ASIA</b>			
India	1220	1507	23.52
China	340	399	17.35
South Korea	8	8	0.00
Sri Lanka	3	3	0.00
Taiwan	3	3	0.00
<b>TOTAL</b>	<b>1574</b>	<b>1920</b>	<b>21.98</b>
<b>South &amp; Central America</b>			
Costa Rica	51	71	39.22
Brazil	20	20	0.00
Argentina	14	14	0.00
Caribbean	13	13	0.00
Mexico	5	5	0.00
Chile	0	2	200.00
<b>TOTAL</b>	<b>103</b>	<b>125</b>	<b>21.34</b>
<b>Pacific Region</b>			
Japan	150	300	100.00
Australia	34	73	114.70
New Zealand	37	37	0.00
<b>TOTAL</b>	<b>221</b>	<b>410</b>	<b>85.52</b>
<b>Middle East &amp; Africa</b>			
Egypt	63	125	98.41
Morocco	54	54	0.00
Iran	11	11	0.00
Israel	8	8	0.00
Africa	3	3	0.00
Jordan	2	2	0.00
<b>TOTAL</b>	<b>141</b>	<b>203</b>	<b>43.97</b>
<b>Grand TOTAL</b>	<b>17706</b>	<b>24471</b>	<b>38.21</b>



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Further Information and advice can be obtained from the Course Director or the Faculty of Engineering Office:

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[www.nottingham.ac.uk/sbe/postgraduate/renewable.htm](http://www.nottingham.ac.uk/sbe/postgraduate/renewable.htm)

Source: Wind Power Monthly.

## CALENDAR OF EVENTS:

**29 June – 6 July – 2002**

World Renewable Energy Congress – VII, Cologne, Germany. Contact: WREN Office, UK

**30 November – 7 December, 2002**

WREN International Seminar in Britain, Old Ship Hotel, Brighton. Contact: WREN Office, UK

**17 – 19 September, 2003**

WREN/ISESCO – International Symposium & Exhibition in Renewable Energy, Kuala Lumpur, Malaysia. Contact: Professor Dr. Baharuddin Yatim, Malaysian Institute of Energy, Faculty of Physical and Applied Sciences, Universiti Kebangsaan, Malaysia, 43600 Bangi, Selangor, Malaysia Telephone: 603 8263384 Fax: 603 8256086

**28 August – 3 September, 2004**

World Renewable Energy Congress – VIII, Marriott Hotel, Downtown, Denver, Colorado, USA. Contact: Mr. Robert Noun, Director, Communications and Public Affairs, National Renewable Energy Lab., NREL, 1617 Cole Boulevard, Golden, Colorado, 80401-3393, USA Tel: 00 1 303 275 3000, or Prof. Ali Sayigh, WREN, 147, Hilmanton, Lower Earley, Reading RG6 4HN, UK. Tel: 44-1189611364, Fax: 44-1189611365, Email: asayigh@netcomuk.co.uk. <http://www.wrenuk.co.uk>