

# SOLAR & RENEWABLE ENERGY

Newsletter



By Lebanese Solar Energy Society LSES

Issue 2

August 2005



## The First Issue

The first issue of April 2004 was supposed to be followed by two others during the year 2004 – Unfortunately we could not respect our promises, in the second half of 2004, due to the lack of financial means and consequently real and concrete achievements. We were hoping that the year 2005 would give us the opportunity to develop our main strategies, as established by our LSES board, but the assassination on February 14th 2005 of our great statesman and builder of Lebanon after the civil war Mr. Rafic HARIRI did put the country in a very dark and unstable political situation.

Today after six months of this tragic and catastrophic event, the Lebanese people succeeded to elect a new parliament and started, through a new government headed by the Prime Minister Mr. Fouad SINIORA, to build a new era in the history of our Lebanon.

### ***What were the achievements of LSES during 2004 and the first half of 2005?***

- LSES subscription to ISES as from mid 2004.
- Renewable Energy exhibition within Project Lebanon 2004 at Biel Beirut.
- Renewable energy day in March 2004 in co-operation with the British Embassy in Lebanon.
- Preparation of the CRESMED program with EEC for photovoltaic, wind and micro hydro rural electrification in Lebanon.
- Cooperation with the Syndicate of Engineers and Architects of Beirut for the renewable Energy contest.
- ESCWA cooperation for renewable Energy development.
- IRI cooperation agreement for solar equipment testing laboratory for the thermal solar products and systems.
- Awareness campaigns in Beirut and Tripoli (North) for the use of the solar hot water systems.
- Agreement with UNDP and MEW for the elaboration of solar standards and certifications within the LCECP project.

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## PROPOSED ACTIONS FOR THE REMOVAL OF BARRIERS TO SOLAR DEVELOPMENT IN LEBANON

**SOLAR ENERGY** in Lebanon is a must, everybody agrees on this statement due to its positive impact on Lebanese economy and environment (see below reminder for those who wants to refresh their minds).

But when it comes to the main issue: "How to develop Solar Energy?" Each and every solar expert has his own point of view.

Well let's make everybody happy! We have decided at LSES to summarize all the problems and the solutions to that strategic question. You will find here below a summary of all the barriers facing the development of Solar Energy as well as some of the main actions to be taken to overcome these barriers.

So anybody that finds himself in a position to help Solar Energy in any of these actions, knows now what to do. If we are of any help at LSES please let us know.

IDENTIFICATION AND ACTION TO BE DONE TO REMOVE BARRIERS TO SOLAR DEVELOPMENT IN LEBANON		
BARRIERS TO DEVELOPMENT	SOLUTION	ACTION WITH
Unconsciousness of Solar advantages	Advertising campaign	Lebanese government Universities NGO LSES Solar Companies
Consumer worries concerning quality of services and products	Certification of products Certification of Services (Qualisol)	UNDP / LIBNOR - I.R.I L.S.E.S.
Consumer difficulties to finance Solar systems	Financing program such as Iskan or Kafalat	Government / EDL Private banking
Difficulties to install solar system on roof prior to approval by building owners	Law implementation to permit installation of Solar System on multiowner buildings	Government Beirut order of Engineer
Cost reduction of Solar equipment	Tax incentive for manufacturer VAT reduction	Government
Lack of incentives others than payback period	Additional incentives such as: EDL cancellation of fixed fees Municipalities tax cancellation Partial financing by government	EDL Municipalities Government
<p><b>REMINDER:</b> All hereabove solutions to remove barriers to Solar development should be motivated by the following national and personal advantages of Solar Energy.</p> <p>Solar Energy will spare millions of USD per year of fuel importation. Solar Energy will spare tons of CO2 rejection in the atmosphere, helping cleaning environment. Solar Energy will create thousands of jobs for many years in various areas of Lebanon. Solar Energy will reduce electrical load on EDL power plant and distribution network. Solar Energy will reduce users energy bill.</p>		



# activities



## "Solar schools- Brighter future" competition by Chafic Abisaid - LSES Member

From 6-12 August 2005, the World's leaders in solar energy gathered in Orlando-Florida- USA to celebrate the anniversary of the International Solar Energy Society (ISES).

To bring special meaning to this important occasion, ISES- in conjunction with the American Solar Energy Society (ASES)- conducted the yearly international student art and essay competition, known as "Solar schools- Brighter future" competition for students in schools already equipped with some kind of solar systems (natural day lighting, solar hot water heating, photovoltaic, passive heating, wind power and even methane digesters).

As a Lebanese chapter of (ISES), the Lebanese Solar Energy Society (LSES) received from ISES an invitation to seek Lebanese schools participation in this international event.

Students in such schools from grade 1-9 (primary and secondary) may compete amongst themselves in both writing and art allowing themselves to express their feelings (in writing or art) how a solar system (s) helps their educational process, saves energy and improves our environment. The two winning students essays (writing and art) with information on the school and its solar system are to be forwarded to ISES. The first twelve schools will win a US\$ 500 each, and one school the international grand prize, where the two winners students and their teacher or supervisor will be invited free of charge to attend the Orlando celebration in August 2005. Our society, with the help of the staff of Al Bia Wal-Tanmia magazine, located, invited and encouraged local eligible schools.

LSES was pleasantly surprised when ISES informed us that the Bawaba Al Ouzai institution (of Dar Al Aytam Al Islamiah), participated and two of their students won the first international grand prize, and conveyed its congratulations.

Mr. Tammam Tayyara, the director of the Bawaba Al Ouzai institution, accompanied the two winning students to the USA and participated in the Orlando celebration. LSES, in turn, offers its congratulations to the winners and the school, director and staff. LSES, also hopes that such a winning result will encourage more schools and students to explore the benefits of solar energies and help increase the awareness of parents and the public opinion.

**Congratulations.**

## Solar Schools-Brighter Future Grand Prize Winners

By Tammam Tayara

The Grand prize winners of Solar Schools-Brighter Future competition Bassam Alaa Elddin and Ali Taleb, the students at Bawaba Al Ouzai (Social Welfare Institutions) enjoyed a week of activities and fun at Orlando Florida. They were invited by the ISES (International Solar Energy Society) and the ASES (American Solar Energy Society) who conducted the International Competition.

The students were honored at the Congress opening plenary on Monday August 9, by presenting to each one of them a certificate indicating that they are the grand prize winners of the competition, and a certificate to the institution which they belong to for participating. After that, they spent the rest of the week enjoying the adventures in Orlando, where they visited Disney World, Sea World, Universal Studios and more. The Institution had participated in this competition for the first time with the coordination of the Lebanese Chapter of the ISES, the Lebanese Solar Energy Society LSES, and the Environment and Development Magazine.



## LSES Join The ISES

In 2004, the Lebanese Solar Energy Society (LSES) became officially a chapter of the International Solar Energy Society (ISES).

This affiliation has opened the door for a closer collaboration and coordination between ISES and LSES. This, in turn, is expected to lead to further development of local capacities and, within this context, LSES contributed a chapter dedicated to the history of the Lebanese section of ISES to be published in the book commemorating 50 years of ISES. Karl Boer, who was president of the American Solar Energy Society in 1975 and 1976, is book editor, which was distributed during the last ISES meeting in Florida on August 2005.

**Dr. Ahmad Hourri, LSES Member**



## LSES as Solar Expert for the account of UNDP and MEW

Many thanks to United Nation Development Program (UNDP) and Ministry of Energy and Water (MEW) for the confidence they put in LSES, chosen as solar thermal expert for the development of a Lebanese Solar Standard in collaboration with LIBNOR.

This Solar Standard should be the corner stone for any future strategy or policy to develop Solar Thermal Energy in Lebanon. This is why we are so proud of helping UNDP and MEW in this mission.

### What about the mission?

This mission is planned for a 4-months duration with 5 main steps.

- 1 The first step was to achieve a survey of the range of Thermal Solar systems found in the Lebanese market including a comparison with similar thermal solar systems found in the international market. A report to UNDP and MEW will summarize all the infos that were gracefully given to LSES surveyors by local manufacturers and traders.
- 2 The second step was to collect all the solar thermal standards existing regionally and internationally and suitable for the Lebanese market. Here also with the help of LIBNOR and ESCWA our mission was largely facilitated.
- 3 The third step which is now underway consists of analyzing and proposing a complete thermal solar system standard and label as well as the definition of testing facilities required for such standard. LIBNOR will of course prepare all the standard procedure to make such standard an official Lebanese Standard to be applicable after discussion with all the stakeholders.
- 4 Finally steps 4 and 5 consist of assessing the strategy to inform on and apply such label and standard in Lebanon.

This mission has been officially announced during the Energy week held at the Syndicate of Engineers & Architects Beirut on 22nd of august 2005.

By Jean Paul SFEIR  
LSES Member





## Topic : Energy Conservation and Efficiency

Prepared by : Anwar Ali, Project Manager (Lebanese Center for Energy Conservation Project)

Energy conservation and efficiency call for the adoption of a series of measures focused on improving the utilization of energy. These are virtually recent concepts initiated in the industrialized countries in 1973 pursuant to the oil prices crisis. These countries found themselves at risk due to the increase of oil prices that greatly affected their economic and social development. Moreover, increasing environmental impacts through harmful emissions and exploitation of fossil fuel resources as well as issues related to climate change have deeply encouraged the promotion of energy conservation and efficiency concepts. During the past 30 years, oil prices fluctuated upwards and downwards depending on the world economic and political trends. However, nowadays the oil prices have got an upward momentum and have reached high levels that made all countries all over the world conscious of the risks facing their economic and social development. Therefore, enormous efforts have been spent by most of the countries, developed and developing, for the last two decades to find alternatives for the fossil fuel such as energy conservation and renewable energy (wind, solar, biomass, etc...) although fossil fuel is still the primary source of energy worldwide. One should be aware that fossil fuels are being depleted at a rate of 100,000 times faster than they are being formed.

The United Nations through its various organizations has been the leader in the development of global projects, protocols and agreements that promote energy efficiency and renewable energy aiming at reducing Greenhouses Gases (GHG) emissions that have direct effect on climate change and improving the living quality of human beings worldwide.

6 The Lebanese Center for Energy Conservation Project (LCECP) is a result of the joint collaboration between the Government of Lebanon represented by the Ministry of Energy and Water (MEW), the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF). It aims at reducing GHG emissions, a major contributor to the climate change, through the improvement of demand side management.

In Lebanon, the imported fossil fuel which accounts for 97% of the country's energy bill, substantial economical savings and environmental enhancement can be achieved if energy conservation policies are being developed and adopted by the Government of Lebanon. The LCECP will also enhance the quality of the local environment and bring positive implications on both economy and health.

The LCECP will provide the necessary engineering,

marketing, and financial services related to energy conservation within different sectors. Furthermore, the LCECP will assist the Government of Lebanon in strengthening its policy aspects and in increasing public awareness pertaining to energy conservation issues. In this regard, the development of standards for energy efficiency equipment is one

of LCECP's main tasks in collaboration with the Lebanese Norms Institute (LIBNOR). To that end, it was essential to define which equipment should be subject to energy efficiency standards under the Project framework and those were AC split units, fridges, electric water heater, solar thermal systems and electric heaters.

The LCECP is pleased to announce its collaboration with the Lebanese Solar Energy Society (LSES) as the Solar Thermal Expert to prepare the draft of the Lebanese standards for solar thermal systems in close coordination with LIBNOR. As per the Project document, the solar thermal system will provide savings in the electrical energy consumption utilized for water heating especially in the residential sector (It is estimated that 45 GWhr/year of thermal solar energy can be utilized which can lead to CO2 emissions reduction by approx. 38,000 tones) due to the fact that the actual area of thermal solar systems installations in Lebanon is still very limited despite the humble increase in the installation of solar water heating systems during the past decade. It is worth noting that the area of the thermal solar rate in Lebanon is 4m<sup>2</sup> per 1,000 habitants compared to around 800m<sup>2</sup> and 500 m<sup>2</sup> per 1,000 habitants for Cyprus and Greece respectively. Such comparison indicates that there is a potential demand for thermal solar systems in Lebanese market.

Finally, LCECP will coordinate with various Project stakeholders to promote and support the energy conservation & efficiency concepts in Lebanon & elevate these concepts to an acceptable level to face the future challenges in both energy demand and prices.



The Opening Session of the Project Coordinating Committee meeting in June 2005



# Regional **GREENPEACE** Boat-Tour Energy Campaign to stop climate change



Climate change is real and is happening now.

Switching to Renewable energy sources can halt its progress – That is why Greenpeace is conducting a Euro-Mediterranean boat-tour to address this problem. The boat-tour represents an excellent opportunity to raise the urgency of climate change, and highlights the importance of public, political, as well as European power sector to engage with this global crisis.

The ship will be coming to Solidere port in Beirut between September 16th and 19th. Make sure to be there, and make a difference.

[ For more information contact Greenpeace office in Beirut on 01-755665 ]  
Or visit the website: <http://www.greenpeace.org/lebanon/en/>

■ By Waël Hmaidan Campaigner ■ Greenpeace Mediterranean ■

# PROJECT LEBANON 2005

6 - 10 September 2005 :: BIEL - Beirut International Exhibition & Leisure Center



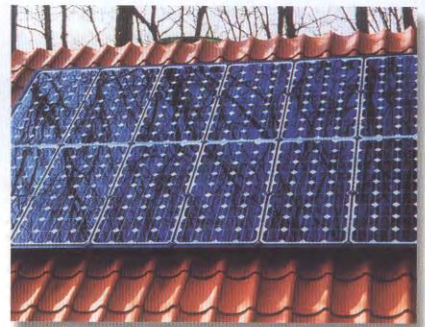
The 11th International Trade Exhibition for Construction Technology, Building Materials, Equipment and Environmental Technology for Lebanon and the Middle East.

VISIT THE LSES - LEBANESE SOLAR ENERGY SOCIETY STAND #G1





# We Have Big Dreams



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