



Press release

# Prix Evenir 2009 awarded to Solar Islands®

Neuchâtel, Switzerland, 30 April 2009. Today, Union Pétrolière awarded the seventh Prix Evenir. This prize for sustainable development, worth 50,000 Swiss francs, was presented in Neuchâtel to Thomas Hinderling, who devised the "Solar Islands" project. Paolo Richter, founder of "Bikes for Africa", received an acknowledgement prize.

To produce clean, moderately priced energy on a large scale – that is the aim of Thomas Hinderling, CEO of the Swiss Center for Electronics and Microtechnology (CSEM). His Solar Islands project will now enable the achievement of this goal. These artificial islands are giant platforms that float on the sea and which, in the long term, will produce the same amount of electricity as a small nuclear-power station. Thanks to a simple design, coupled with optimized technologies and suitable materials, the energy produced could be offered at a competitive price of 10 to 20 centimes per kWh.

### Distinction for a technological breakthrough

The project has already convinced several investors, among them the jury of the Prix Evenir. According to Ingrid Kissling-Näf, President of the Jury of the Prix Evenir: "from the jury's point of view, the high degree of technological innovation, the potential for growth, and the powerful vision of the Solar Islands' inventors merited the award."

### Acknowledgement prize for a sustainable initiative

Alongside the Prix Evenir, Union Pétrolière has presented an award every year since 2003 to a project which reconciles ecology, economics and social engagement. And this year, the Prix Evenir jury is consciously making another landmark step by recognizing an exceptional social and micro-economic initiative in the guise of the project "Bikes for Africa". Old bicycles are repaired in Switzerland by socially deprived people and sold in Africa at cost price by local partners.

"The high quality of the two prize-winning projects makes them stand out, yet they have very different profiles: one is a small-scale sustainable project while the other is a new technology that could revolutionize energy production at a global level. By awarding prizes to both, we are paying tribute to two important forms of sustainable engagement," explains Ingrid Kissling-Näf.

Additional information on the winners, the Prix Evenir and the members of the jury are attached and are also available on the internet at <u>www.prixevenir.ch</u>.

### **Contacts:**

- Ingrid Kissling-Näf, President of the Jury, +41 (0)31 324 96 00, ingrid.kissling-naef@bbt.admin.ch
- Rolf Hartl, Director of Union Pétrolière, +41 (0)79 414 04 83, hartl@erdoel.ch
- Stefanie Niederhäuser, Secretary of Prix Evenir, +41 (0)44 455 56 61, info@prixevenir.ch

Tel. +41 (0) 44 455 56 61 Fax +41 (0) 44 455 56 51 E-Mail info@prixevenir.ch



The Union Pétrolière prize for sustainable development is awarded to the Solar Islands project

# Solar Islands<sup>®</sup> generate clean energy

Neuchâtel, Switzerland, 30 April 2009. Low-cost solar energy is now a reality – thanks to the Solar Islands project, which has been awarded the Prix Evenir 2009. This innovative solution opens up previously unexplored areas in the field of solar energy, with the aim of producing moderately priced, clean energy on a large scale.

Solar energy, the most important source of renewable energy, should in future cover a significant part of our energy needs. Currently, its exploitation is still far too expensive to compete with fossil fuels or nuclear energy. Based on an original idea by Thomas Hinderling, the CSEM (Swiss Centre for Electronics and Microtechnology) project makes possible a significant reduction in the cost of solar energy. The concept consists of fitting solar panels to giant floating platforms. Such an installation could be up to five kilometers in diameter and produce roughly the same amount of energy as a small nuclear-power station.

# A technological breakthrough

The Solar Islands system is a convincing concept. Highly reflective mirrors are arranged on top of a resistant plastic sheet which is fixed to a steel ring. An air cushion is created below the membrane by maintaining a slightly higher-than-normal pressure. Water circulates in tubes positioned horizontally above the mirrors, and turns into steam when heated by solar radiation. To ensure an optimum concentration of the sun's rays on the tubes, the whole island turns to follow the sun's trajectory. This movement is made possible by using hydrodynamic motors. The steam is then conveyed to installations built on land where it is used to produce electricity. The islands also allow solar energy to be converted into other forms that are more easily stored, such as hydrogen or simply heat.

# A well-conceived prototype

The first solar island prototype has been installed in the Ras al Khaimah desert and will be commissioned in summer 2009. Due to its structural flatness, it has a low air resistance that means it can withstand relatively strong winds. The entire island turns to follow the trajectory of the sun, so that no mechanism is required to orientate the individual panels, thus reducing costs considerably. The Solar Islands team has also taken the cleaning of the panels into account. This task, much simplified by the solar installation's flat architecture, will be carried out by small robots installed on the island.

# **CSEM** centre suisse d'électronique et de microtechnique



Model of a solar island with the potential to supply energy to many thousands of homes.

### Sustainable impetus

It was the economic, ecological and social aspects of the project that convinced the Prix Evenir jury. Solar islands are able to produce energy in large quantities without harming the environment. They will help reduce global  $CO_2$  emissions as well as protecting the environment and human health. The project creates employment, particularly during its installation phase, and also contributes towards the economic development of the region. In the long term, competitively priced solar energy from this type of installation will have a significant impact on the world's energy market. When the islands are operational and supplying electricity to homes, the quality of life in these areas will be considerably improved, and regions that benefit from good sun exposure will also acquire a better status.

### **Prix Evenir**

Since 2003, Union Pétrolière has rewarded projects that reconcile ecological, economic and social issues in a sustainable manner.

For more information on the Prix Evenir and the members of the jury: www.prixevenir.ch

# CSEM – an innovation center

Established in 1984, CSEM (Centre Suisse d'Electronique et de Microtechnique SA) is a private R&D centre specializing in microtechnology, nanotechnology, microelectronics, systems engineering and communications technologies. It provides its industry customers and partners with tailor-made, innovative product solutions based on its commercial and technological expertise, further expanded by the results of its applied research. Additionally, through the establishment of start-up businesses, it actively contributes to developing Switzerland as a centre of industry and commerce. To date, CSEM has established a total of 29 new enterprises with more than 500 employees.

About 400 highly-qualified employees from the most varied scientific and technical fields work for CSEM in Neuchâtel, Zurich, Basel, Alpnach and Landquart. They represent more than 30 different nationalities and constitute the basis of the company's creativity, dynamism and innovation potential.

Further information available at www.csem.ch

# Contact details for the winner and for additional information:

- Dr Thomas Hinderling, CEO, CSEM Neuchâtel, +41 (0)32 720 56 57, <u>thomas.hinderling@csem.ch</u>
- Florence Amez-Droz, Head of Corporate Communications, CSEM Neuchâtel, +41 (0)32 720 52 03, <u>florence.amez-droz@csem.ch</u>

### Additional information on Prix Evenir / images and photos:

Stefanie Niederhäuser, Secretary of Prix Evenir, +41 (0)44 455 56 61, info@prixevenir.ch