Implementation of the SOLWA solar still in Peru

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March 2011

The SOLWA (Solar water) solar still is a new system to produce safe drinking water from salt or contaminated water by using solar radiation.

Unlike other techniques currently available, this technology uses sunlight as the only source of energy. The solar still can be moved and placed anywhere provided that there is sunlight. It can be installed anywhere in the tropics or in the equatorial area. SOLWA is built with materials easy to find anywhere and does not need skilled workforce.

A first SOLWA small-sized module was built and launched in February 2011 in Trujillo (Peru) in cooperation with the National University of Trujillo (UNT) and CESVITEM an Italian NGO (Milan).

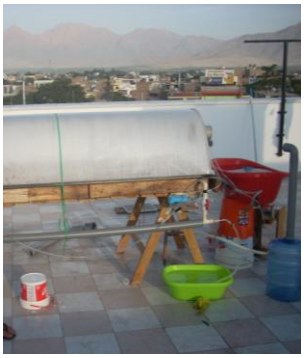
CEVITEM provided its industrial plant to host the first experimental solar still. The National University of Trujillo (UNT) certified the performance of the module and carried out both chemical and biological analyses of contaminated water and water purified by SOLWA.

Based on the positive results of the experimental phase, the National University of Trujillo established a collaboration with the University of Venice to build 20 prototypes that will be studied by the faculties of Chemistry and Engineering of the University of Peru. This new large-scale test will involve university students in a lab-research.

In addition, Peruvian authorities are willing to produce these water purification modules in order to provide population with a tool to purify groundwater. In fact, it has been proven that water reserves were contaminated by heavy metals owing to the intense activities of the mining industry in the area.

Take into account these situations, the Peruvian government has recently promulgated a law requiring the extractive industries to set aside a percentage of the profits to clean up the environment and provide support to the local population. Hence, Trujillo and University authorities were looking for new sustainable solutions, and the SOLWA experimental solar still gave a great contribution in this regard. The fund of the extractive industry can be used as well in Trujillo to provide local population with a solar still SOLWA module so as to purify ground water which was contaminated by industrial activities.

The SOLWA solar still proved to have the required technical features, particularly in a desert area, very sunny and isolated from conventional sources of energy. This initiative, which provides local population with an opportunity of building the solar still by their own using local materials, thus allowing generation of income opportunities for unemployed people and thus increasing local economy



The SOLWA solar still has developed interest in an increasing number of countries which have been attracted by the opportunity of providing jobs and clean water to population, with a significant impact on public health, affected by problems of poor quality of water supplies.

On 17 March 2011, the SOLWA solar still was awarded as the best Italian innovative idea in the 2011 competition organized by the MIT Technology Review magazine of Boston. Based on the award, SOLWA accessed directly to participate in the World Competition to be held in September 2011 in the prestigious American University.

For further information:

Brochure SOLWA

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