P R E S S R E L E A S E

Soltecture proves: Solar construction enables energy-independent, attractive living and mobility

Thin-film modules with award-winning design used in flagship project from Vattenfall, Volvo and A-hus

Berlin, 04 August 2011 – Together with its partners Vattenfall, Volvo and A-hus, the Berlin solar module manufacturer Soltecture (formerly Sulfurcell) is setting new standards for sustainable construction: the energy-plus house, which has been purpose built for the One Tonne Life Project with the aim of reducing annual CO_2 emissions per capita, is equipped with a heat storage system and 106 Soltecture thin-film solar modules made in Germany. 57 of the modules are integrated into the south-facing elevation and form an elegant, black glass surface, while another 49 modules are installed on the roof. The total rated capacity of the Soltecture thin-film modules amounts to 6.5 kilowatt peak (kWp).

Dr. Nikolaus Meyer, CEO and founder of Soltecture explains: “Here the solar modules become the architectural highlight. They are deployed as facade and roof elements and replace passive construction materials. That is building for the future. This is solar construction.” The building-integrated solution transforms the otherwise unused surfaces into small, decentralised power plants, which not only supply clean energy but also help to reduce costs. The four-member Swedish test family, who lived in the prototype house for the last six months, drew all the necessary electricity and additional heat from the solar power system in combination with a small solar thermal system on the carport. During the course of the year, the PV system actually generates considerably more energy than is required in the home. The surplus energy is used for the electric car or is fed into the national grid.

The conclusion after completing the six-month project: With the help of energy-efficient, cutting edge building services technology and the integrated solar power system, the family managed to reduce their CO_2 emissions from an average of 7 tonnes per head to 1.5 tonnes.

Solar construction with award-winning design

The thin-film solar modules feature not only high yields but also an attractive appearance, enabling them to be excellently incorporated in the design concept of the Swedish star architect Gert Windgårdh. They offer a clear contrast to the white wood used in the building and ensure an aesthetically homogenous appearance. Soltecture’s thin-film modules have just been awarded the USA’s ‘2011 Dwell on Design Award for Energy’. “The One Tonne Life Project is modern Scandinavian lifestyle. We’re combining traditional Swedish timber construction with the latest technology and clear design to form an energy-efficient and aesthetically pleasing building,” explains the architect.

With its ten years of experience in thin-film technology, the Berlin company was already able to make an impressive contribution during the design phase, enabling the Swedish prefabricated house manufacturer, A-hus, to integrate photovoltaics in the construction. It was decided to use lightweight, roof-integrated *SCG-HV-RI* modules, which thanks to their compact format enable one-man installation. “The installation of the lightweight system on the roof battens is particularly easy and offers excellent design possibilities,” reports Christian Axelsson from A-Hus, the construction manager for the project.

The One Tonne Life Project

The One Tonne Life Project is a joint project from Vattenfall, Volvo, A-Hus and other partners. The aim is to reduce annual CO_2 emissions from an average of seven tonnes to one tonne per person. The proof that it is possible to produce a dramatically smaller CO_2 footprint was provided by a Swedish family of four. The energy-plus house, which has been purpose built for the project just outside Stockholm, offers a diverse range of possibilities for saving CO_2. Following the successful pilot project in Hässelby near Stockholm, which used a total of 106 modules, the next house has now been completed in Göteborg. Soltecture supplied the 111 thin-film modules required, which have a total rated output of 6.8 kWp. 56 modules have been installed on the roof of the Göterborg house while 55 modules are integrated in the facade.

You can find further information and the final report at: www.onetonnelife.com

About Soltecture

Founded in 2001, Soltecture (formerly Sulfurcell Solartechnik) is a spin-off from the Helmholtz Centre Berlin for Materials and Energy. With 250 employees, the company is now one of the world’s three leading manufacturers of thin-film solar power modules based on CIS semiconductors. Soltecture has received multiple awards for its cutting edge research and product development. The UK’s Guardian newspaper recently again listed the Berlin company among the “hottest 100 clean technology companies in Europe”. In recent years, renowned international investors, including Intel Capital, Climate Change Capital, Vattenfall Europe and GdF Suez Soltecture, have provided growth financing amounting to more than 110 million euros. This fresh capital has been utilised for constructing new production facilities and for research and development. Further information is available at: www.soltecture.de.

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