

SHC SOLAR AWARD 2013 to Drake Landing Company – 52 homes heated with 98% solar

24 September 2013. The IEA Solar Heating Programme (IEA SHC) has presented its 2013 SHC SOLAR AWARD to the Drake Landing Company from Canada, comprised of four organizations – United Communities (developer), Sterling Homes (builder), ATCO Gas (utility), and the Town of Okotoks (municipality). The company was formed to oversee ownership and operation of the Drake Landing Solar Community, which uses solar thermal collectors and borehole heat storage to provide over 90% of space heating of 52 homes with solar thermal energy and recently set a new world record of 98% solar heating performance in its sixth year of operation. Bruce Littke from ATCO Gas and Keith Paget from Sterling Homes received the award at the International Conference on Solar Heating and Cooling for Buildings and Industry in Freiburg, Germany.

“The Drake Landing Solar Community is a clear number one in many respects”, said Werner Weiss, chairman of the IEA SHC.” It is the first large-scale solar district heating system with seasonal storage in North-America. And it is the first in the world designed to provide over 90% of the space heating load from solar energy. Having achieved its goal, it has become a stellar example for solar heating and cooling worldwide”.

The SHC SOLAR AWARD is given to an individual, company, or private/public institution that has shown outstanding leadership or achievements in the field of solar heating and cooling, and that supports the work of the IEA Solar Heating and Cooling Programme. With the award, the IEA SHC recognises not only the excellent results of the project, but also the pioneering spirit of the involved partners. With no previous experience on designing, building, and operating large scale solar community systems, these organizations had to undergo a steep learning curve which began with a study tour of the major solar seasonal storage projects in Europe, culminating in a final design workshop to review and finalize the major design concepts for the Canadian project. Their enthusiasm, dedication and support throughout the design, construction, and performance monitoring periods has enabled the Drake Landing project to achieve the success it has, exceeding expectations and setting a new world record, 98% solar heating fraction, in its sixth year of operation.

The Drake Landing Solar Project consists of 52 homes and an array of 800 solar thermal collectors, mounted on the roofs of the garages. The collectors generate a combined 1.5 Megawatt of thermal power on a typical summer day. The heat is collected in a short term storage and from there pumped into a borehole energy storage system comprised of 144 holes stretching to a depth of 37 metres and covering an area of 35 metres in diameter. By the end of summer, the earth of the seasonal storage reaches over 70°C. In winter, water is pumped through the pipes in the boreholes, thus collecting the heat and delivering it to the homes. A detailed description of the system can be found on the Drake Landing Solar Project website at <http://dlsc.ca/>.

PRESS RELEASE



Further information:

- Drake Landing Solar Project: <http://dlsc.ca/>
- For photos of the award ceremony, please contact communications@iea-shc.org

About the International Energy Agency's Solar Heating and Cooling Programme (IEA SHC):

- The Programme was established in 1977.
- Its objectives are co-operative research, development, demonstration and exchange of information regarding solar heating and cooling systems.
- 21 countries and the European Union are IEA SHC members.
- The research topics of the current 12 projects range from general topics, such as "Solar Resource Assessment and Forecasting" and system and materials research, such as "Large Solar Thermal Systems" and "Polymeric Materials for Solar Thermal Applications" to market support topics such as "Solar Rating and Certification".
- Additional information: www.iea-shc.org

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