



Energy efficient buildings a top priority in southeast Sweden

The interest was great when the Energy Agency for Southeast Sweden gathered municipalities, housing companies, contractors and others interested to discuss passive houses and energy efficient buildings on Wednesday November 19th 2008.

– This is a highly topical issue: climate change, the demands of the EU, the Swedish energy efficiency investigation, and last but not least the financial crisis, lead to more and more talk about energy efficiency in both new and existing settlements, says Stefan Olsson, MD of The Energy Agency for Southeast Sweden.

During the day the participants heard about the experience of several construction projects with energy efficient technology:

- Massive wooden houses in eight floors with passive house technology in Växjö: Erik Hallonsten, MD, Hyresbostäder, the Municipal Housing company in Växjö
- Kv.Oxorget in Värnamo – results and experiences after 2 years of operation: Börje Göransson, MD, Finnvedsbostäder, the Municipal Housing company in Värnamo
- Renovation to passive house standard in Alingsås: Ing-Marie Odegren, MD, Alingsåshem, the Municipal Housing company in Alingsås
- Harbor House in Gothenburg: Per Andersson, Northern Älvstranden Development AB



Passive houses are very well insulated houses with no conventional heating system. Instead they are heated by the people in the house and the activities that require electricity such as lighting, television, laundry etc. Total energy consumption, including household electricity is estimated to be about half of what current Swedish building standards require.

An effort worthwhile



The lecturers agreed that energy efficiency pays off, even in the short term.

– All analysts believe that the energy prices will continue to rise. One kWh in Germany cost three Swedish crowns (about 30 cents) today and the electricity market is international, said Ing-Marie Odegren.

And the tenants welcome change. Neither Hyresbostäder nor Finnvedsbostäder has

encountered any negative reactions from tenants when they have introduced individual measurement of hot water and heating.

– Tenants like to be able to affect their energy use and thus their costs, said Erik Hallonsten.



– We just have to be vigilant that the residents do not increase their consumption of electricity when it costs less to heat the apartment. We may see a slight tendency that some people choose to use their electricity to other things, said Per Andersson.

Less than 40 kWh per square meters

The work was in full swing when the participants went to the workplace where massive wooden houses in eight floors with passive house technology are constructed in Växjö. The buildings are part of the EU project SESAC where the Energy Agency for Southeast Sweden is involved as technical coordinator and has assisted Hyresbostäder as an energy expert.

– These two houses are predecessors in two ways, they are passive houses of wood and they are built at the height, said Eric Hallonsten.

The houses will use waste water heat to preheat the domestic hot water to further reduce energy use. Furthermore a photovoltaic plant will be installed on the roof to produce electricity used directly in the houses that equals approximately 10–15% of the electricity consumption in the houses. Hyresbostäder expects that the passive houses will use less than 40 kWh per square meter per year for hot water and heating.

New tenants have already shown interest to live in the houses.

– During the first day of announcement people signed up their interest to half of the 62 apartments, said Erik Hallonsten.



Methods for more passive houses

Skills, both from buyers and performers, interaction, customer care and persistence, are some of the things that are needed if more energy efficient building projects are to become a reality.

– To build the purchasing competence of the commissioner of a building to have clear requirements and follow-up the orders are very important, said Per Andersson.

To encourage the development of energy efficient buildings regional actors have joined together in a network called “Energy Efficient Buildings in the Southeast”.

– There are several players, including Växjö University, VKAB and The Energy Agency for Southeast Sweden, who initially worked up a proposal which will be presented in detail at a briefing at Växjö University in January 2009, says Stefan Olsson.

The focus will be on renovation of existing buildings. The network aims to technically and financially support a professorship and a research team at Växjö University.

In collaboration with ALMI Kronoberg, The Energy Agency for Southeast Sweden organizes a package travel to Stuttgart, Germany on 28–30 January 2009 to attend the fair CEP (Clean



Energikontor Sydost
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Energy Power), which shows the latest in renewable energy and sustainable energy efficient buildings (see www.cep-expo.de).