



MountEE - Energy efficient and sustainable building  
in European municipalities in mountain regions  
IEE/11/007/SI2.615937

**GOOD PRACTICE SUSTAINABLE BUILDINGS**  
**CATEGORY SUSTAINABLE BUILDINGS**

## **“Bäckåsen” – a low energy building in Gällivare**

<b>Region / local area considered:</b> Sweden	<b>Good practice submitted by</b> Nenet Energy Agency
<b>1) Short description of the action/strategy/project</b>  "Bäckåsen" – a low energy building in Gällivare  A low energy house in Northern Sweden built with industrial methods. Power consumption is less than 75 kWh/m <sup>2</sup> and a density lower than 0.4 l/m <sup>2</sup> s. The building is as Environmentally Classified Building Silver.	
<b>2) Background</b> <ul style="list-style-type: none"> <li>• The cold climate in the northern parts of Sweden makes great demands on the construction work to achieve high energy efficiency.</li> <li>• The 100% governmentally owned mining company LKAB has been mining in the area of Kiruna and Gällivare/Malmberget for more than 100 years. The expansion of the iron ore fields around the mining industry in Gällivare result in a huge demand for new housings.</li> <li>• Bäckåsen, buily by Lindbäcks Bygg, is the first construction of apartment buildings in Malmberget in the last 50 years.</li> </ul>	
<b>3) Detailed project/program description</b>  Targets of the project: <ul style="list-style-type: none"> <li>• Contributing to sustainability targets in new residential areas as described in planning document "New Vision Gällivare";</li> <li>• Creating new living space in a phase of change due to a growing mining area;</li> <li>• Developing prefabricated low-energy-houses for Northern climate</li> </ul> Expected long term and indirect benefits: <ul style="list-style-type: none"> <li>• Attractive modern neighbourhoods in Gällivare;</li> <li>• Strengthening building industries competence to build low-energy houses for the Northern climate at reasonable costs;</li> </ul> Target group(s): <ul style="list-style-type: none"> <li>• Possible tenants;</li> <li>• Building industry;</li> <li>• Gällivare municipality.</li> </ul> Technical description of project: A low energy house in Northern Sweden built with industrial methods. Power consumption is less than 75 kWh/m <sup>2</sup> and density lower than 0.4 l/m <sup>2</sup> s. The building is as Environmentally Classified Building Silver.	
<b>4) Funding/financing/costs</b>  Funding: Mining company LKAB and Lågan programme	

### **5) Main results**

A low energy house in Northern Sweden built with industrial methods. Power consumption is less than 75 kWh/m<sup>2</sup> and density lower than 0.4 l/m<sup>2</sup>s. The building is classified as Environmentally Building Silver.

### **6) Analysis – lessons learnt and success factors**

Have you encountered difficulties?

- A better result could have been achieved through a better place and a more adapted shape of the house.

Drivers and success factors

- Need for new living space;
- Future legal requirements;
- Certification system;
- Funding through Lågan programme;
- Sustainability as one of the strategic priorities for New Vision Gällivare.

### **7) Time frame**

Start date: 2010

End date: 2012

### **8) Contact**

Organisation: Nenet

Name contact person: Wolfgang Mehl

Phone: +46 (0)70 201 37 48

Email : wolfgang@nenet.se

Web site: www.nenet.se