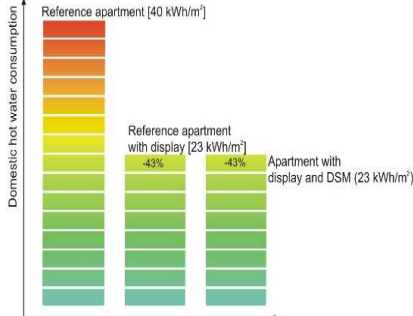


Intelligent and communicative metering system - Växjö (Sweden)

<p>Keywords</p>	<p>Demand side management (DMS), energy savings, education, awareness raising, metering system</p>
<p>Main photos</p>	
<p>Objectives of the action</p>	<p>The main objective of this initiative is to raise the awareness of energy use among tenants via intelligent and communicative metering system and thus reduce the energy consumption by 10%.</p>
<p>Description of the action</p>	<p>Individual metering systems for heat, electricity and water consumption have been installed for tenants in Växjö. Furthermore, data containing information about consumption in particular households has been transferred to tenants in the intelligent and communicative way (putting the information on view for all tenants concerned or visualisation options within the web-based system).</p> <p>This demand side management (DMS) strategy has been developed to make energy-related issues easier to understand and incline tenants to reduce their consumption (with visualisations and comparison options being main awareness raising tools). Moreover, special competitions have been organised in order to engage tenants even further. This has proved to be a good way to make them understand how easy it can be to reduce their daily energy consumption.</p> <p>A web based system has been developed to provide tenants with a tool to visualise their energy consumption and compare their results with those of other households (according to different areas, such as heat, electricity, water).</p>
<p>Results / Achievements</p>	<p>The strategy has turned out to work well and initial results demonstrate lower energy consumption than expected. While comparing results of the flats involved in the action and those of an average Swedish apartment, it comes into light that concerned flats have:</p> <ul style="list-style-type: none"> ➤ 34% lower energy consumption (relates to flats, where tenants have to pay for their own energy consumption, which in turn creates economic incentives to save energy) ➤ 43% lower domestic hot water consumption (with relation to flats, where the electricity cost is included in the rent and therefore there is no real motivation to save energy). 
<p>Friendly advice for replication</p>	<ul style="list-style-type: none"> ➤ Collecting the metering data has proved to be time consuming. In order to obtain valid metering results, a long period of successful metering is necessary (a longer period will be less affected by variations caused by behavioural changes and climate) ➤ Close cooperation between energy and housing companies is also necessary, as experiences from both sides are very valuable while developing the DSM strategy ➤ When using metering systems, it is also of a great importance to use the right method (e.g. in this project, two methods of measurement of heating energy consumed were used and the one concerning the measurement of indoor temperature turned out to be unreliable while working in new energy efficient buildings)
<p>Online information</p>	<p>www.veab.se (Växjö Energi AB website, also available in English)</p>
<p>Contact</p>	<p>Lars EHRLÉN Växjö Energi AB Kvarnvägen 35 / Växjö, Sweden Tel/Fax: +46 470 775 150 E-mail: lars.ehrlen@veab.se</p>