


<b>Primary school 27 separates apartment from heating system – Bielsko-Biala, Poland</b>	
<b>Keywords</b>	<b>Building Refurbishment, Optimisation of Heating System</b>
<b>Pictures</b>	
<b>Objectives</b>	Improving energy efficiency of the school's heating system and reduce heating costs.
<b>Description</b>	<p>Initially, before the improvements were made, primary school 27 was not insulated and was connected to district heating. In 2000-2001 new PVC-framed windows were installed and a new heat exchanger with automatic regulation was connected to the heating system.</p> <p>As a matter of fact, the school disposes of classrooms and teaching facilities and habitable apartments. Also the apartments used to be connected to the heating system which resulted in the fact that the entire school was heated long after the children and staff had left, in order to keep the occupants of the apartment warm.</p> <p>By a simple separation of the two heating systems, the one for the on-site apartments and the other one for primary school, significant improvements in energy and emissions performance could be achieved (overall improvement from an E rating to a D rating concerning energy consumption).</p> <p>Overall costs for the performed action have been low and investment payback has been very short. The action is easy to replicable in other school buildings, as the incorporation of apartments within schools is quite common (especially in Eastern European countries).</p>
<b>Results / Achievements</b>	<p>Results of the project were determined as follows:</p> <ul style="list-style-type: none"> <li>- CO<sub>2</sub> emissions avoided: 20 kg per m<sup>2</sup> and year</li> <li>- Money saved: approximately €8,500 per year</li> <li>- Energy saved: 197,000 kWh per year</li> <li>- Ecological benefits: decreased about 63,400 kg CO<sub>2</sub> per year in local thermal power plant</li> <li>- Change in behaviour: Increased awareness that substantial savings and reductions are achievable through simple, cost effective investment.</li> <li>- Decision-makers are now more likely to involve specialists in decision making prior to investment.</li> </ul>
<b>Online information</b>	<a href="http://www.display-campaign.org/rubrique276.html">http://www.display-campaign.org/rubrique276.html</a>
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