


<b>Building</b>	<b>Pilot B2</b>			
Photo				
Name	Center of Informatics of Technical University of Braunschweig			
Location	Mühlenpfordtstr. 23, 38106 Braunschweig, Germany			
Country	Germany			
Type of Building	Education / Office			
Year of Construction	1976 / 2001			
Occupancy	90-100 %			
Energy supply	District heating and electrical grid			
Building characteristic: Keywords	Educational building, office building, standard from 1970s, low energy building, high potential for energy savings			
<b>ICT System</b>				
System Structure	<i>Energie Navigator</i> : client/server-based monitoring and analysis framework			
Technical requirements	Existing building management system and data exchange interface, read-only connection to <i>Energie Navigator</i>			
Frontends and functions	Web-frontends for generic information and expert frontends for specific analysis, information to users and building management experts			
Date of Implementation	January 2010			
<b>Physical information</b>	<b>Old part (1976)</b>	<b>New part (2001)</b>		
Net floor area	8570	8.945	m <sup>2</sup>	
Average U-value of constructions	2,6	0,28	W/(m <sup>2</sup> ·K)	
Average U-value of windows	1,1 – 3,1	1,6	W/(m <sup>2</sup> ·K)	
<b>Primary indicators (see D1.2 for further information)</b>	<b>No.</b>	<b>Baseline</b>	<b>After measures</b>	<b>Unit (per year)</b>
Primary energy consumption	1	4.066,99	3.578,95	MWh
Specific primary energy consumption	1a	232,20	204,34	kWh/m <sup>2</sup>
Delivered electricity	2	1.228,19	1.080,81	MWh
Specific delivered electricity	2a	70,12	61,71	kWh/m <sup>2</sup>
Delivered heating energy	3	1.053,14	926,76	MWh
Specific delivered heating energy	3a	60,13	52,91	kWh/m <sup>2</sup>
Delivered cooling energy	4	-	-	MWh
Specific delivered cooling energy	4a	-	-	kWh/m <sup>2</sup>
CO <sub>2</sub> Emissions	5	1.003,57	883,14	ton(CO <sub>2</sub> )
Specific CO <sub>2</sub> Emissions	5a	57,30	50,42	kg(CO <sub>2</sub> )/m <sup>2</sup>
Relative reduction of CO <sub>2</sub> emissions	6	-	12,00	%
Relative energy savings in primary energy	7	-	12,00	%
Energy cost savings - actual costs	8	4,65	4,09	€/m <sup>2</sup>
Relative energy cost savings - actual costs	8a	-	12,00	%