

**HUNGARY: Idősek Otthona és Módszertani Intézménye, Külsővat
(Psychiatric nursing home)**

The institute started its operation in 1973, with a capacity of 80 inhabitants, enlargement in 1980 up to 110. In 1991, additional 90 beds were added – at present 198 elderly people are in long-term residential care by a staff of 88 people.

The institution offers, Physiotherapy treatment to there residents. Available are small and high-frequency devices for healing acute and chronic illnesses to intermediate care facilities as part of rehabilitation help.

The institute is equipped with a 300 meal kitchen, laundry with a 250 kg daily capacity equipped with updated washing and ironing machines.

The institute got within last 20 years consequently update of building infrastructure, as sanitary blocks are renewed, one lift installed, and IT structures improved, by creation of an Europe-point for IT development.

Since 2005 the institution's management established a training center for social care staff in the institute's training department, not only its own employees, but also in all over the county's social care worker are accepted to participate courses. More than 800 workers were trained since 2005. In 2007, "Gerontology care" as higher learning courses are established. Per year about 26 students are able to gain qualifications. After full implementation of UIEM Energy Services – the Director of the institution is interested to set up - training courses for more "energy efficient social care".



PROJECT SUMMARY

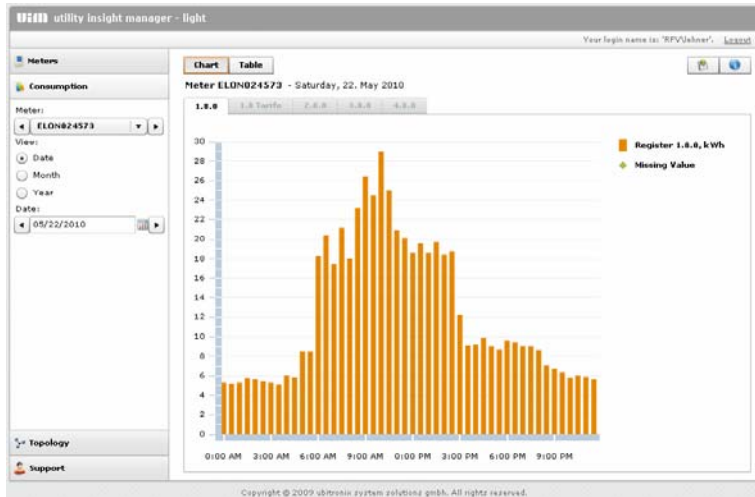
Company name (acronym)	Külsővat
First metering installed	17 th December 2009
Baseline consumption (2006 – 2008)	302 kWh/m2/a
Final consumption (2009 – 2010)	
Savings / avoided consumption	About – 40% *)

Saving generated by
renewal of heating boilers

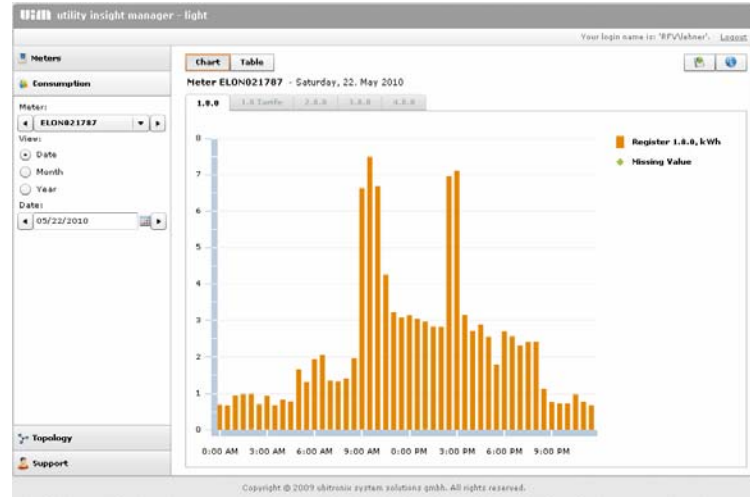
STATUS QUO ANALYSIS

By a detailed “Energy Audit”, within last 20 years achieved improvements of building infrastructure have to be evaluated, Renewal and maintenance of building infrastructure was not always executed in a coordinative manner.

Weakness is given in operation of kitchen and laundry equipment which causes peak consumption, and will show concentration of operation starting with 7/8:00 in the morning and be ended with about 15:00 in the afternoon.



overall electricity consumption 22 May 2010



electricity consumption in kitchen

Over all consumption metering and metering of kitchen and laundry shows this problem clearly.

Given by all this detailed reasons, building performance indicator is round 300 kWh/m²/a, reduced by about 40% gas consumption reduction, caused by replacement of out dated boilers of the heating system. Saving effect of this investment of about 100,000 € could be raised, if the heating monitoring and steering system will be also updated.

NEED FOR INTERVENTIONS

By establishment of an Energy Service Contracting proceeding – via a 3PF tool update of building infrastructure focused to building envelope (isolations, windows) have to be improved.

Condition of building structure – given by first “Energy Check” analysis will allow improvement of building performance indicator up to 30 – 35 kWh/m²/a Needed investment could be provided by an Energy/Efficient Investment Programme on County level

SME POINT OF VIEW

Management of institution was within last 20 years open for improvement of building structures – so fare they are open for “Energy and Operation Audits”.

HU-IM part of aIM4SMEs Project: List of Public Buildings, Veszprém County

Intelligent Energy  Europe

Contract no. EIE/07/136/SI2.466711, Duration: 12/2007 – 03/2010



5	Name of Building/Company			Idősek Otthona és Módszertani Intézménye, Külsővat (Psychiatric nursing home)		
	Address			http://www.iokvat.hu/kulsovati-idosek-otthonarol-roviden		
	Street			Béri Balogh Adám u. 1		
	City			9532 Külsővat,		
	Name of Director			First name	Last name	
				József	Szalai	
	Contact			Phone	Mobile	Email
				0036 89342150	0036 302372682	idok@vpmegye.hu
	Clerk (HVAC Technician)					
	Name			First name	Last name	
			Zoltánné	Sebestyén		
Contact			Phone	Mobile	Email	
			0036 89342150		idok@vpmegye.hu	



Buildings Key-Data		Occupation:	
Year of construction:	1973	hours per day:	24
Usable Area in m ²	4,264	days per week:	7
Number of Users	88 (Staff)+198	weeks per year:	52

Annual Energy Consumption	2008	2007	2006
Electricity (kWh)	294,459	222,928	219,921
Gas (GJ)	3,993	3,505	3,748
Gas (m ³)	116,574	102,336	109,435
Gas (kWh)	1,109,167	973,696	1,041,241
Summary (kWh)	1,403,626	1,196,624	1,261,162
Electricity 1 kWh/HUF	40.31	40.31	40.31
Gas 1 kWh/HUF	12.39	10.48	11.73
Energy Index (kWh/m²/a)	329.18	280.63	295.77

Annual Cost of Energy consumption	2008	2007	2006
Electricity (HUF)	11,870,400	8,986,800	8,865,600
Gas (HUF)	13,741,200	10,204,800	12,214,800
Others			
Water (HUF)	4,098,000	2,890,800	3,033,600
Water (m ³)	10,219	7,245	8,474
Summary (HUF)	29,709,600	22,082,400	24,114,000

Technical specification of meters	Registration number and products name	View
Electricity	Registration number meter 1:	one EON meter outside of the plot,
Connection #: 925871	Meter #: 20180736105310	
Modem #: 650010600010715	Types: SL 7000.SL761C 230V 5A	
Gas	Registration number meter 1:	
	0001081600; (08)08206968	
	Producer:	
2 gas sub meters	Registration number meter 1:	
	Producer: MOM	
Water	Registration number meter 1:	
2 sub meters		

Remarks:		
Operation started 1973, 3rd building wings established round 1980		
HU-IM E-Metering equipment:	E-Meters:	Date of Installation: 17 - 20 th Dec.2009
DC: LJ 00037 437	Main Building:	ELON021 772
CT: ELON 0245 573	Kitchen:	ELON021 787
	Laundry:	ELON021 337

Key data sheet of "Energy Check"

aIM 4 SMEs

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AIM 4 SMEs is a Europe-wide project to demonstrate the potential for energy savings from automatic intelligent metering in small/medium-sized enterprises.

The project involves nine partners from five countries (Austria, Hungary, Poland, Portugal and the UK), including businesses, local/regional energy agencies, an association of municipalities, universities and a utility company.

Intelligent Energy  **Europe**

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