

Energy Efficiency in High-Rise Refurbishment

Regional Summary Series

Moderate climate EU10 (E)



Map of Base Region E

www.euroace.org/highrise



BASE REGION E: MODERATE CLIMATE EU10 COUNTRIES

This is a data summary for base region E – the **Czech Republic, Hungary, Slovakia and Slovenia**. This regional summary is intended purely for informational purposes – it provides the quantitative results for the integration of [energy efficiency measures](#) into the refurbishment of a high-rise building typical for each country. For more information about the region, including the assumptions underlying the data, please refer to the main report *Energy Efficiency in the Refurbishment of High-Rise Residential Buildings* or contact research@ukace.org with “High-rise query” in the subject line.

Headline facts and figures about the high-rise stock

	No. of dwellings	as proportion of total stock	Buildings (theoretical)	Energy saving potential in high-rise stock	as %age of national energy demand	MtCO ₂
Czech Republic	1,293,202	33.8%	21,553	40%	3.0%	2.14
Hungary	1,000,822	23.2%	16,680	37%	2.8%	1.12
Slovakia	625,362	37.5%	10,423	40%	2.7%	0.66
Slovenia	96,442	12.4%	2,009	30%	0.9%	0.10

Energy savings, investment costs and cost of conserved energy in a typical high-rise building

	Energy saved in building [kWh/m ² a]		Annual investment cost [€/m ² a]	Cost of conserved energy [€cent/kWh]	Simple payback [a]
Czech Republic	129.7	73.9%	2.12	1.6	8.5
Hungary	130.7	73.9%	2.00	1.5	10.4
Slovakia	89.4	77.7%	1.44	1.6	8.0
Slovenia	152.2	74.4%	2.11	1.4	7.7

Energy savings, costs of energy and of CO₂ mitigation in a typical high-rise building

	Energy saved in building [kWh/m ² a]		Cost of supplied energy [€cent/kWh]	Cost of conserved energy [€cent/kWh]	Net cost of conserved energy [€cent/kWh]	Cost of CO ₂ mitigation [€/tCO ₂]	Net cost of CO ₂ mitigation [€/tCO ₂]
Czech Republic	129.7	73.9%	3.3	1.6	-1.6	71	-71
Hungary	130.7	73.9%	2.5	1.5	-1.0	67	-43
Slovakia	89.4	77.7%	3.4	1.6	-1.8	70	-77
Slovenia	152.2	74.4%	3.1	1.4	-1.7	61	-73

Other resources

	Ministry responsible for housing	Known case study of high-rise refurbishment or otherwise relevant	Best practice resource
Czech Republic	Ministry for Regional Development	Condominium in Jablonec nad Nisou	
Hungary	Ministry of Economy and Transport	Csombor Utca, Budapest	
Slovakia	Ministry of Construction and Regional Development	Various, Banská Bystrica and Bratislava	
Slovenia	Ministry of the Environment and Spatial Planning	Kejžarjeva 38, Jesenice	

This, along with the website at www.euroace.org/highrise is intended as a living set of resources. If any of the links are incorrect or if you know of any other high-rise refurbishment related case studies and resources, please contact research@ukace.org with “High-rise resource” in the subject line.