



CONCERTED ACTION
ENERGY PERFORMANCE OF BUILDINGS

EPBD Key Implementation Decisions in The Slovak Republic

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NATIONAL WEBSITES

www.mindop.sk www.inforeg.sk; www.tsus.sk; www.mhv.sk; www.siea.sk; www.sksi.sk

1. Key Implementation Decisions, KIDs

no	Key Implementation Decisions - General Background	Description / value / response	Comments	Description
1.1	Definition of public buildings (according to article 9 b)	Public building is a building owned or administered by a public entity	The definition is set in Act 321/2014 on Energy Efficiency, section 2, k).	
1.2	Definition of public buildings used by the public (according to article 13)	Buildings often visited by public	Under the Act 555/2005 as amended by act 300/2012	
1.3	Number of residential buildings	Total number of residential buildings 1,092,338 Apartment buildings 65,723 Single-family houses 1,026,615	Census 2011, official statistics for the period 2011-2016, database of TSUS + estimate	
1.4	Number of non-residential buildings	27,067	Database of TSUS (till 2011), official statistics (2011-2016) + estimate	
1.5	If possible share of public buildings included in the number given in 1.4	15,435	Database of TSUS + estimate (official statistics missing)	
1.6	If possible share of commercial buildings included in the number given in 1.4	5,000	Estimate, official statistics missing	
1.7	Number of buildings constructed per year (estimate)	11,500	Official statistics and estimate	
1.8	If possible share of residential buildings constructed per year (estimate, included in the number given in 1.7)	11,200	Estimate based on statistic data	
1.9	If possible share of non-residential buildings constructed per year (estimate, included in the number given in 1.7)	300	Estimated (official statistics missing)	

1.10	Useful floor area of buildings constructed per year in million square meters (estimate)	2,000,000	Average from statistics + estimate	
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2. KIDs for New Buildings

no	Key Implementation Decision - New Buildings	Description / value / response	Comments	Description
2.1	Requirements for energy performance of residential buildings in current building code	<p>Since 1 January 2016 set requirements on ultra-low level of construction - requirements meet the cost-optimal levels of minimum requirements on EPB</p> <p>Since 1 January 2021 set requirements on NZEB construction level (from 1 January 2019 set for public buildings)</p>	<p>U-values in W/(m².K) (e.g. external walls 0.22, roof 0.15, windows 1.0), heat recovery min. 60 %; global indicator kWh/(m².a)A1: ap. buildings less than 63, family houses less than 108;</p> <p>U-values in W/(m².K) (e.g. external walls 0.15, roof 0.10, windows 0.6), heat recovery min. 60 %; 50 % RES; global indicator kWh/(m².a)A0: ap. buildings less than 32, family houses less than 54;</p> <p>Calculations are according to EN standards, climatic and indoor conditions according to national STN standards</p>	
2.2	Requirements for energy performance of non-residential buildings in current building code	<p>Since 1 January 2016 set requirements on ultra-low level of construction - requirements meet the cost-optimal levels of minimum requirements on EPB</p> <p>Since 1 January 2021 set requirements on NZEB construction level (from 1 January 2019 for public buildings)</p>	<p>U-values in W/(m².K) (e.g. external walls 0.22, roof 0.15, windows 1.0), heat recovery min. 60 %; global indicator kWh/(m².a) A1: e.g. office buildings less than 122, schools less than 68;</p> <p>U-values in W/(m².K) (e.g. external walls 0.15, roof 0.10, windows 0.6), heat recovery min. 60 %; 50 % RES; global indicator kWh/(m².a)A0: e.g. office buildings less than 61, schools less than 34;</p> <p>Calculations are according to EN standards, climatic and indoor conditions according to national STN standards</p>	
2.3	Is the performance level of nearly zero energy (NZEB) for new buildings set in national legislation?	YES	<p>In the Act 555/2005 as amended by Act 300/2012 art. 2, section 8</p> <p>Definition: Nearly zero-energy building means a building that has a very high energy performance. The nearly zero or very low amount of energy required to use such building should be provided with effective thermal protection and covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby.</p>	

2.4	Nearly zero energy (NZEB) level for residential buildings (if set)	U-values in W/(m ² .K) (e.g. external walls 0.15, roof 0.10, windows 0.6), heat recovery min. 60 %; 50% RES; global indicator kWh/(m ² .a) A0: ap. buildings less than 32, family houses less than 54;	Calculations are according to EN standards, climatic and indoor conditions according to national STN standards	
2.5	Nearly zero energy (NZEB) level for non- residential buildings (if set)	U-values in W/(m ² .K) (e.g. external walls 0.15, roof 0.10, windows 0.6), heat recovery min. 60 %; 50% RES; global indicator kWh/(m ² .a) A0: e.g. office buildings less than 61, schools less than 34;	Calculations are according to EN standards, climatic and indoor conditions according to national STN standards	
2.6	Are nearly zero energy buildings (NZEB) defined using a carbon or environment indicator	Partly	Global indicator is set for primary energy. Emission factors are set for different energy carriers in the Ministerial Decree 324/2016. Result of CO ₂ Emissions is included in the EPCs. Requirements are not set	
2.7	Year for nearly zero energy (NZEB) to be implemented for residential buildings	2021	For all new buildings and for renovated buildings when functionally, technically or economically feasible	
2.8	Year for nearly zero energy (NZEB) to be implemented for non-residential buildings	2019 - public buildings 2021 - all new buildings and renovated existing buildings when functionally, technically and economically feasible	For all new buildings and for renovated buildings when functionally, technically or economically feasible	
2.9	Is renewable energy a part of the overall or an additional requirement	50% of RES is required for NZEBs	Ratio of RES use is showed in every EPC	
2.10	Specific comfort criteria for new buildings, provide specific parameters for instance for airtightness, minimum ventilation rates	Yes	Criteria for internal air; min air change 0.5 1/h; airtightness 0.6	

3. KIDs for Existing Buildings

no	Key Implementation Decision - Existing Buildings	Description / value / response	Comments	Description
3.1	Is the level of nearly zero energy (NZEB) for existing buildings set in national legislation?	Yes	In the Act 555/2005 as amended by Act 300/2012 art. 2, section 8	
3.2	Is the level of nearly zero energy (NZEB) for existing buildings similar to the levels for new buildings?	Yes, they are similar to the levels of the new buildings	Existing buildings should fulfil the requirements on new buildings if technically, functionally and economically feasible	
3.3	Definition of nearly zero energy (NZEB) for existing residential buildings (if different from new buildings)	Definition is the same as for new buildings	Definition: Nearly zero-energy building means a building that has a very high energy performance. The nearly zero or very low amount of energy required to use such building should be provided with effective thermal protection and covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby.	
3.4	Definition of nearly zero energy (NZEB) for existing non-residential buildings (if different from new buildings)	Definition is the same as for new buildings	Is the same as for new buildings	
3.5	Overall minimum requirements in case of major-renovation	Definition of major renovation (according to Act 555/2005 as amended by 300/2012): building construction modifications to an existing building, which affect more than 25% of its surface area. In particular by thermal insulation of the peripheral and roof structures and replacement of the openings.	U-values in W/(m ² .K) (e.g. external walls 0.22, roof 0.15, windows 1.0), heat recovery min. 60 %; global indicator kWh/(m ² .a) A1: ap. buildings less than 63, family houses less than 108	
3.6	Minimum requirements for individual building parts in case of renovation	Duty to fulfil the requirements on U-value (after national standard STN 73 0540-2:	SR is characterised by one climatic zone.	

		2012, STN 73 0540-2/Z1: 2016) since 1 January 2016 set for ultralow energy buildings (Ur1); in the case when functionally, technically and economically not feasible implanting the proposed measure is set the requirement to fulfil required hygienic criteria (in such case U-value should be lower than Umax	External wall Umax: 0.46; Ur1: 0.22 Roof Umax: 0.30; Ur1: 0.15 Windows Umax: 1.70; Ur1: 1.00	
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4. KIDs for Energy Performance Certificates, EPCs

no	Key Implementation Decision - Energy Performance Certificates	Description / value / response	Comments	Description
4.1	National database for EPCs	Yes	Centralised register	
4.2	Number of energy performance certificates per year (for instance average of 3 years)	13,866/2014, 14,276/2015, 16,229/2016 For 2014-6: 35,142 family houses, 4,671 apartment buildings, 1,415 office buildings, 512 schools		
4.3	Number of EPCs since start of scheme	81,748 (10/2009 - 12/2016)	Issuing of EPCs started from 1 January 2008, but the obligation to register them started from 1 October 2009 due the revision of the Ministerial Decree. The number of issued EPCs during this period is missing from the total sum.	
4.4	Number of assessors	395	List of assessors is kept at the Slovak Chamber of Civil Engineers (SKSI) separately for four different type of assessors working on EPCs (thermal protection, heating and hot water, ventilation and air-conditioning, lighting). Registration is mandatory.	
4.5	Basic education requirements for assessors	Master Degree	Civil engineer, architect also machinery or electrotechnical following the requirements stated in act 555/2005 section 6, clause 3	
4.5	Additional training demands for assessors	Not mandatory	Different events organized by Slovak Chamber of Civil Engineers are organised irregularly for focused on new regulations and procedures.	
4.6	Quality assurance system	Trade inspection carried out 148 inspections in 2016.	According to the Act 555/2005 the State Energy Inspection, as part of the Slovak Trade Inspection since 2014, is responsible for the quality assurance (QA) of EPCs. The Slovak Trade Inspection is responsible to check if public buildings display EPCs. The processing of EPCs is done on-line. The correct input data is checked and EPC finishing and printing is only possible if the entered data matches the specified conditions. The number of refused processed EPCs is not registered.	

5. KIDs for Inspection Systems

no	Key Implementation Decision - Inspection Systems	Description / value / response	Comments (replace text)	Description
5.1	Is there a national database for heating inspections	Yes	According to Act 314/2012 on regular inspections of heating and AC-systems, every LB performing inspection is obliged to send reports from inspections performed in previous year to the operator of the monitoring system for energy efficiency. Reports as paper or electronic (.pdf or .doc or .xls) files are stored in the database, verified, analysed and processed in order to prepare the yearly report to the Ministry of Economy.	
5.2	Is there a national database for cooling inspections / AC	Yes	According to Act 314/2012 on regular inspections of heating and AC-systems, every LB performing inspection is obliged to send reports from inspections performed in previous year to the operator of the monitoring system for energy efficiency. Reports as paper or electronic (.pdf or .doc or .xls) files are stored in the database, verified, analysed and processed in order to prepare the yearly report to the Ministry of Economy.	
5.3	Are inspection databases combined with EPC database for registration of EPCs and inspection reports	No		
5.4	Chosen option A or B for heating systems (inspection or other measures)	A (regular inspection scheme)		
5.5	Number of heating inspections; reports per year (if option A)	See Table 5 in “Implementation of the EPBD in the SLOVAK REPUBLIC”	The values related to inspection reports are based on yearly reports from the SIEA (operator of the monitoring system for energy efficiency) to the Ministry of Economy. Reports from LBs are the subject of mandatory registration.	
5.6	Chosen option A or B for AC-systems (inspection or other measures)	A (regular inspection scheme)		

5.7	Number of air-conditioning / cooling system inspections; reports per year (if option A)	See Table 7 in “Implementation of the EPBD in the SLOVAK REPUBLIC”	The values related to inspection reports are based on yearly reports from the SIEA (operator of the monitoring system for energy efficiency) to the Ministry of Economy. Reports from LBs are the subject of mandatory registration.	
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