



CONCERTED ACTION
ENERGY PERFORMANCE OF BUILDINGS

EPBD Key Implementation Decisions in Latvia

Status in December 2016

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NATIONAL WEBSITES

<https://www.em.gov.lv/>

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 9b)	Buildings that are occupied and owned by public authorities: Owned by the State and in the possession of the authorities and where the State authorities are located.	Transposed in Cabinet Regulation No. 383 of 9 July 2013 "Regulations regarding Energy certification of Buildings" (Regulation No. 383) Annex 5 for Minimum Permissible Level of Energy Performance of Buildings for New Buildings.	
1.2	Definition of public buildings used by the public (according to article 13)	Buildings frequently visited by the public - public buildings Public Structure - building, where more than 50% of its total area is public spaces or spaces for ensuring public functions, or engineering structure intended for public use (such as stadiums or bandstands).	Transposed in the Law on the Energy Performance of Buildings (LEPB) Article 13 first part point 3. Public building definition is determined in Latvian Building Code LBN 208-15 "Public structures"	
1.3	Number of residential buildings	361,889 (90.10x10 ⁶ m ²)	Information from National Real Estate Cadastre Information System (1 st of January, 2017)	
1.4	Number of non-residential buildings	1,007,178 (114.64 x10 ⁶ m ²)	Information from National Real Estate Cadastre Information System (1 st of January, 2017)	
1.5	Number of public buildings	32,825 (27.29 x10 ⁶ m ²)	Information from National Real Estate Cadastre Information System (1 st of January, 2017) There are no separate statistics for public buildings and commercial buildings.	
1.6	Number of commercial buildings	32,825 (27.29 x10 ⁶ m ²)	Information from National Real Estate Cadastre Information System (1 st of January, 2017) There are no separate statistics for public buildings and commercial buildings.	

1.7	Number of residential buildings constructed per year (estimate)	New residential buildings built (x10 ³ m ² total area) 2014 - 483.7 2015 - 444.7 2016 - 372.9	Central Statistical Bureau	
1.8	Number of non-residential buildings constructed per year (estimate)	Data is not available.		

2. KIDs for New Buildings

no	Key Implementation Decision - New Buildings	Description / value / response	Comments	Description
2.1	Energy Performance of residential buildings in current building code	<p>Minimum permissible level of energy performance of buildings, energy performance assessment for heating of new buildings:</p> <p>For multi-apartment buildings $\leq 60 \text{ kWh/m}^2$ per year</p> <p>For one-apartment or two-apartment buildings $\leq 70 \text{ kWh/m}^2$ per year</p> <p>Minimum energy performance requirements (building heat transfer coefficient and U values) (normative / maximal):</p> <p>For residential buildings + hospitals + kindergartens + homes for elderly:</p> <p>Roofs - 0.15 k / 0.20 k Floors - 0.15 k / 0.20 k Walls - 0.18 k / 0.23 k Windows - 1.30 k / 1.80 k Doors - 1.80 k / 2.30 k Thermal bridges - 0.10 k / 0.15 k</p>	<p>Minimum permissible level of energy performance of buildings is set in Regulation No. 383 Annex 5 which provides a timeframe for requirements to achieve nearly zero-energy level as minimum energy performance level for all new buildings since 2021.</p> <p>Minimum energy performance requirements for heat transfer coefficient and for U values are set in Cabinet Regulation No. 339 of 30 June 2015 "Regulations of Latvian Building Code LBN 002-15 - Thermal requirements of the buildings envelopes" (LBN 002-15). LBN 002-15 requirements for new buildings are the same as for renovations.</p> <p>k - temperature factor U values (normative / maximum)</p>	
2.2	Energy performance of non-residential buildings in current building code	<p>Minimum permissible level of energy performance of buildings, energy</p>	<p>Minimum permissible level of energy performance of buildings is set in Regulation No. 383 Annex 5 which provides a timeframe for requirements to achieve</p>	

		<p>performance assessment for heating of new buildings:</p> <p>For non-residential buildings $\leq 90 \text{ kWh/m}^2$ per year</p> <p>Minimum energy performance requirements (building heat transfer coefficient and U values) (normative / maximum):</p> <p>For non-residential buildings - hospitals - kindergartens - homes for elderly:</p> <p>Roofs - 0.20 k / 0.25 k Floors - 0.20 k / 0.25 k Walls - 0.20 k / 0.25 k Windows - 1.40 k / 1.80 k Doors - 2.00 k / 2.50 k Thermal bridges - 0.15 k / 0.20 k</p> <p>For industrial buildings:</p> <p>Roofs - 0.25 k / 0.35 k Floors - 0.30 k / 0.40 k Walls - 0.25 k / 0.30 k Windows - 1.60 k / 1.80 k Doors - 2.20 k / 2.70 k Thermal bridges - 0.30 k / 0.35 k</p>	<p>nearly zero-energy level as minimum energy performance level for all new buildings since 2021.</p> <p>Minimum energy performance requirements for heat transfer coefficient and for U values are set in Cabinet Regulation No. 339 of 30 June 2015 “Regulations of Latvian Building Code LBN 002-15 - Thermal requirements of the buildings envelopes” (LBN 002-15).</p> <p>LBN 002-15 requirements for new buildings are the same as for renovations.</p> <p>k - temperature factor</p> <p>U values (normative / maximum)</p>	
2.3	Is the performance level of nearby zero energy for new buildings set in national legislation?	YES	(Regulations No.383, point 17., requirements for NZEB) 17. A building shall be classified as a nearly-zero energy building, if it meets all of the following requirements: 17.1. building energy performance indicator corresponds to Class A by concurrently ensuring	

			<p>conformity of indoor climatic conditions with the requirements of the laws and regulations in the field of construction, hygiene and labour protection;</p> <p>17.2. the total primary energy consumption for heating, hot water supply, mechanical ventilation, cooling, lighting accounts for no more than 95 kWh per square meter per year;</p> <p>17.3. high-efficiency systems are used in the building, which:</p> <p>17.3.1 ensure recovery of no less than 75% of the ventilation heat loss during the heating season;</p> <p>17.3.2. ensure at least partial use of renewable energy;</p> <p>17.4. there is no fossil fuel heating equipment installed in the building.</p>	
2.4	Nearly zero energy level for residential buildings	Performance class for heating ≤ 40 kWh/m ² per year	(For residential buildings, building energy performance class for heating ≤ 40 kWh/m² per year, based on Class A.)	
2.5	Nearly zero energy level for non-residential buildings	Performance class for heating ≤ 45 kWh/m ² per year	(For non-residential buildings, building energy performance class for heating ≤ 45 kWh/m² per year, based on Class A.)	
2.6	Are nearly zero energy buildings defined using a carbon or environment indicator	NO	But this information should be expressed and there is need for them to be included in EPCs.	
2.7	Year for NZEB to be implemented for residential	2021	From 1 January 2021 and hereinafter	
2.8	Year for NZEB to be implemented for non-residential	2019/2021	<p>From 1 January 2019 and hereinafter for buildings which are owned by the State and in the possession of the authorities and where the State authorities are located</p> <p>From 1 January 2021 and hereinafter for all buildings</p>	

2.9	Is renewable energy a part of the overall or an additional requirement?	PARTLY	For NZEB at least partially the use of renewable energy is ensured	
2.10	Specific comfort criteria for new buildings, provide specific parameters, e.g. for airtightness, minimum ventilation rates	Yes	$n_{50} \leq 1.5$ for mechanical ventilated buildings $n_{50} \leq 3.0$ for non-mechanical ventilated buildings $n_L = 0.4$ for residential buildings $n_L = 1.2$ for offices see Austrian Standard ÖNORM B 8110-5	

3. KIDs for Existing Buildings

no	Key Implementation Decision - Existing Buildings	Description / value / response	Comments (replace text)	Description
3.1	Is the level of nearly zero energy for existing buildings set in national legislation?	YES	<p>(Regulations No.383, point 17., requirements for NZEB)</p> <p>17. A building shall be classified as a nearly-zero energy building, if it meets all of the following requirements:</p> <p>17.1. building energy performance indicator corresponds to Class A by concurrently ensuring conformity of indoor climatic conditions with the requirements of the laws and regulations in the field of construction, hygiene and labour protection;</p> <p>17.2. the total primary energy consumption for heating, hot water supply, mechanical ventilation, cooling, lighting accounts for no more than 95 kWh per square meter per year;</p> <p>17.3. high-efficiency systems are used in the building, which:</p> <p>17.3.1 ensure recovery of no less than 75% of the ventilation heat loss during the heating season;</p> <p>17.3.2. ensure at least partial use of renewable energy;</p> <p>17.4. there is no fossil fuel heating equipment installed in the building.</p>	
3.2	Is the level of nearly zero energy for existing buildings similar to the levels for new buildings?	YES	It is the same	
3.3	Definition of nearly zero energy for existing buildings	-	It is the same	

3.4	Level of NZEB for existing buildings	-	It is the same	
3.5	Minimum requirements for individual buildings parts by renovation		Requirements for U values are the same as for new buildings (see 2.1. and 2.2.)	
3.6	Overall minimum requirements by major renovation	<p>15.² Minimum permissible level of energy performance of buildings for buildings to be reconstructed or renovated:</p> <p>15.² 1. for multi-apartment residential house - energy performance indicator for heating does not exceed 90 kWh per square meter per year;</p> <p>15.² 2. for one-apartment and two-apartment residential buildings of different types - energy performance indicator for heating does not exceed 100 kWh per square meter per year;</p> <p>15.² 3. for non-residential buildings - energy performance indicator for heating does not exceed 110 kWh per square meter per year.</p>	Requirements for major renovation are set in Regulation No.383 point 15. ² .	

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	Limited access for documents, public access for publicly available information (class, energy performance indicators => EPCs first page). https://bis.gov.lv/bisp/lv/epc_documents	
4.2	Number of energy performance certificates per year	2,315	Average of last 3 years (average from 2016 and 2017)	
4.3	Number of EPCs since start of scheme Number of buildings/units with a valid EPC	4,968 4,908	Amount of EPCs registered. There could be more EPCs issued bit not registered	
4.4	Number of assessors	Total 93 experts with competence: To issue an EPC - 91experts To issue a temporary EPC - 91 experts To issue inspections - 9 experts	Information based on register of independent experts.	
4.5	Basic education requirements for assessors	Education requirements for experts to issue EPCs: 2.1. acquired vocational or academic higher education of the first or second level, provided the educational programme provides knowledge of the following: 2.1.1. heat engineering of building envelopes; 2.1.2. technical building systems (heating, cooling, ventilation, air-conditioning, water supply, lighting); 2.1.3. construction climatology and the microclimate of premises;	Requirements for independent experts are set in Cabinet Regulation No. 382 of 9 July 2013 "Regulations Regarding Independent Experts of Energy Performance of Buildings" (Regulation No. 382).	

		<p>Education requirements for experts to issue inspections:</p> <p>3.1. acquired vocational or academic higher education of the first or second level, provided the study programme provides knowledge of the following:</p> <ul style="list-style-type: none"> 3.1.1. heating installations and systems; 3.1.2. air-conditioning equipment and systems; 3.1.3. cooling equipment and systems; 3.1.4. equipment measurements and adjustment; <p>Requirements for building specialists:</p> <p>4. An independent expert who has the building trade certificate in the field of designing buildings or designing heating systems and ventilation systems, or has architect's practice certificate, on the basis of the decision referred to in Paragraph 26 of this Regulation, may determine the planned energy performance of a building or building units to be designed, reconstructed, or renovated, and may issue a temporary energy certificate of the building.</p> <p>5. An independent expert who has the building trade certificate in the field of constructing heating systems and ventilation systems, on the basis of the decision referred to in Paragraph 26 of this Regulation, may perform the inspections of air-conditioning systems.</p>		
4.6	Additional training demands for assessors	<p>Training requirements for experts to issue EPCs:</p> <p>2.3. at least two years of field experience assessing energy performance of buildings, under supervision of an independent expert with a certified competence in the field of assessing energy performance of an existing building or its units, and issuing energy certificate for buildings, as well as assessing energy performance of building or building units to be designed, reconstructed, or renovated, and issuing a temporary energy certificate of the building;</p>	Requirements for independent experts are set in Regulation No. 382.	

		<p>2.4. passed the competence test in accordance with Paragraph 10 of this Regulation.</p> <p>Training requirements for experts to issue inspections:</p> <p>3.2. at least six months of field experience in the field of inspecting heating systems and air-conditioning systems, under the supervision of an independent expert with a certified competence in inspecting heating systems and air-conditioning systems, and issuing inspection report;</p> <p>3.3. passed the competence test in accordance with Paragraph 11 of this Regulation.</p>		
4.7	Quality assurance system	Works mainly on complaints.	Requirements for Quality assurance system are set in Regulation No. 382.	

5. KIDs for Inspection Systems

no	Key Implementation Decision - Inspection Systems	Description / value / response	Comments (replace text)	Description
5.1	National database for heat inspections	YES	Limited access https://bis.gov.lv/bisp/lv/epc_documents	
5.2	National database for cooling inspections / AC	YES	Limited access https://bis.gov.lv/bisp/lv/epc_documents	
5.3	Inspection databases combined with EPC database	YES	In the same register with possibility to link inspections to EPCs.	
5.4	Number of heating inspections / reports per year	12		
5.5	Number of air-conditioning / cooling system inspections / reports per year	6		



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