CONCERTED ACTION
ENERGY PERFORMANCE OF BUILDINGS

EPBD Key Implementation Decisions in **Belgium - Brussels Capital**

Status in December 2016

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NATIONAL WEBSITES

www.environnement.brussels, www.leefmilieu.brussels

1. Key Implementation Desissions, KIDs

no	Key Implementation Decisions - General Background	Description / value / response	Comments	Description
1.1	Definition of public buildings (according to article 9 b)	The public buildings are those occupied by legal entities defined in Cobrace (see Comments).	Ordinance (COBRACE) of 2013/05/02, art. 2.4.2§3 With adefinition for public authority in art. 1.3.1_4° of the ordinance	
1.2	Definition of public buildings used by the public (according to article 13)	The building-units used by one or more public authorities in a same building	Ordinance (COBRACE) of 2103/05/02, art. 2.2.14§2 With a definition for public authority in art. 1.3.1_4° of the ordinance	
1.3	Number of residential buildings	162,242 buildings (523,162 units)	Number in 2015 http://statbel.fgov.be/en/statistics/figures/	
1.4	Number of non-residential buildings	18,430	Number in 2015 http://statbel.fgov.be/en/statistics/figures/	
1.5	If possible, share of public buildings included in the number given in 1.4	641	Number in 2015 http://statbel.fgov.be/en/statistics/figures/	
1.6	If possible, share of commercial buildings included in the number given in 1.4	17,789	Number in 2015 http://statbel.fgov.be/en/statistics/figures/	
1.7	Number of buildings constructed per year	270	Average over 2013-2015 (240 residential + 30 non-residential) http://statbel.fgov.be/en/statistics/figures/	
1.8	If possible, share of residential buildings constructed per year (estimate, included in the number given in 1.7)	240	Average over 2013-2015 (240 residential + 30 non-residential) http://statbel.fgov.be/en/statistics/figures/	

1.9	If possible, share of non-residential buildings constructed per year (estimate, included in the number given in 1.7)	30	Average over 2013-2015 (240 residential + 30 non-residential) http://statbel.fgov.be/en/statistics/figures/	
1.10	Useful floor area of buildings constructed per year in million square meters (estimate)	/		

2. KIDs for New Buildings

no	Key Implementation Decision – New Buildings	Description / value / response	Comments	Description
2.1	Requirements of energy performance of residential buildings in current building code	45 + max(0; 30-7.5 * C) +15*max(0; 192/V_{EPR}-1) kWh/m².year	C= compactness V= volume of the building-unit	
2.2	Requirement of energy performance of non-residential buildings in current building code	95-(2.5*C) kWh/m².year or (95-(2.5*C))+(1,2*(X-15)) kWh/m².year	At this point in time, with non-residential units we refer to offices and schools only. C= compactness The 'X' is a reference net heating requirement that has been designed for EPB-units whose poor orientation or compactness makes it unfeasible to enforce compliance with a net heating energy requirement of 15kWh/m².year	
2.3	Is the performance level of nearby zero energy for new buildings set in national legislation?	Yes		
2.4	Nearly zero energy (NZEB) level for residential buildings (if set)	45 + max(0; 30-7.5 * C) +15*max(0; 192/V_{EPR}-1) kWh/m².year	C= compactness V= volume of the building-unit	
2.5	Nearly zero energy level (NZEB) for non-residential buildings (if set)			
2.6	Are nearly zero energy (NZEB) buildings defined using a carbon or environment indicator	No, only Primary Energy Requirement in kWh/m².year		
2.7	Year for nearly zero energy (NZEB) to be implemented for residential buildings	2015 (Res)		
2.8	Year for nearly zero energy (NZEB) to be implemented for non-residential buildings	2019 (on behalf of public authority) 2021 (Com)		

2.9	Is renewable energy a part of the overall or an additional requirement	Is part of the overall requirement		
2.10	Specific comfort criteria for new buildings, provide specific parameters for instance for airtightness, minimum ventilation rates	Ventilation rate requirements: YES - Residential (Annex VI) - Non-Residential (Annex VII) Overheating: YES In case of overheating the temperature shall not exceed 25°C more than 5% of the year	Defined in the execution order of 2007/12/21 fixing the requirements in matter of energy performance and indoor climate of buildings	

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?	No		
3.2	Is the level of nearly zero energy (NZEB) for existing buildings similar to the levels for new buildings?			
3.3	Definition of nearly zero energy (NZEB) for existing residential buildings (if different from new buildings)	$f_{GEE} \leq 0,95$ The requirement not to exceed is expressed in kilowatt / hour / m^2 / year. The composition of a non-residential unit may vary according to the "functions" present in it (cooking, health care, sports facilities, etc.). The requirement shall be determined in proportion to the requirements laid down for each of its functions regarding heating, domestic hot water, lighting, cooling and auxiliaries, minus the energy produced by Cogeneration and / or photovoltaic panels.	See table page 10 for the requirements for each non-residential "function": http://document.environnement.brussels/opac_css/elecfile/IF_Evolutions2017_AE15_FR.pdf	
3.4	Definition of nearly zero energy (NZEB) for existing non-residential buildings (if different from new buildings)	Not defined yet		
3.5	Overall minimum requirements in case of major-renovation	For renovation with less than 75% change in the envelope and replacement: U-value requirement (Annex XI): - Roof: 0.24W/m^2K - External wall (above ground): 0.24 W/m^2K - Ground floor: 0.3 W/m^2K - Windows: Uw=1.8 W/m^2K - Glass: Ug=1.1 W/m^2K - Curtain walls: Ucw=2.0 W/m^2K		

		Ventilation rate: - Residential (Annex VI) - Non-residential (Annex VII) Definition for units considered as new: over 75% change in the envelope and replacement of all the technical installations Requirements: - U-value requirement (Annex XI) - Ventilation rate (Annexes VI & VII) Net Heating Requirement: 1.2 * max (15 ; X) kWh/m².year Primary Energy Requirement: - Residential: 1.2*[45 + max(0 ; 30-7.5 * C) +15*max(0 ; 192/VEPR-1)] kWh/m².year - Offices / Schools: 1.2*[95-(2.5*C)] kWh/m².year or 1.2*[(95-(2.5*C))+(1.2*(X-15))] kWh/m².year		
3.6	Minimum requirements for individual building parts in case of renovation	U-value requirement (Annex XI): - Roof: 0.24W/m²K - External wall (above ground): 0.24 W/m²K - Ground floor: 0.3 W/m²K - Windows: Uw=1.8 W/m²K - Glass: Ug=1.1 W/m²K - Curtain walls: Ucw=2.0 W/m²K Ventilation rate: - Residential (Annex VI) - Non-residential (Annex VII)	Annexes of the execution order of 2007/12/21 fixing the requirements in matter of energy performance and indoor climate of buildings	

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	Regional	EPBD is a regional competence in Belgium	
4.2	Number of energy performance certificates per year (for instance average of 3 years)	1,850 EPC/year for new building-unit 127 EPC/year for existing non-residential buildings 27,000 EPC's/year for houses and apartments	Average (2014-2016)	
4.3	Number of EPCs since start of scheme	180,070 of units with EPC - Residential unit: New: 7,338 Existing: 171,630 - Non-residential unit: New: 159 Existing: 941		
4.4	Number of assessors	749 EPB-advisors (for new or renovated) 1,274 EPB certificators (for existing residential buildings) 115 EPB certificators (for existing non-residential buildings)		
4.5	Basic education requirements for assessors	Architectural, engineer of architecture, civil engineer, bio-engineer or industrial engineer degree or an equivalent degree delivered in another state for EPB advisors. EPB certificators may make use of an experience in energy in order to participating to the courses		

4.5	Additional training demands for assessors	5 days + retraining sessions when requested by the authority		
4.6	Quality assurance system	An external QA is set, with QEs is. On a yearly basis, they achieve the control of 1.5% of issued EPC’s. 1 control on the 4 consists of doing the same EPC in situ.		

5. KIDs for Inspection Systems

no	Key Implementation Decision - Inspection Systems	Description / value / response	Comments	Description
5.1	Is there a national database for heat inspections	Regional database for the attestations of acceptances and periodic inspection (for periodic inspection, only when the installation does not meet the requirements.)	EPBD is a regional competence in Belgium	
5.2	Is there a national database for cooling inspections / AC	No real regional database (XLS sheet)	Given the “small” number of facilities involved, administrative follow-up is carried out on the basis of an excel table.	
5.3	Are inspection databases combined with EPC database for registration of EPCs and inspection reports	Not yet but scheduled		
5.4	Choosen option A or B for heating systems (inspection or other measures)	A		
5.5	Number of heating inspections / reports per year	Unknown	The administration only receives periodic inspection attestations for installations that do not comply with the requirements.	
5.6	Number of air-condition / cooling system inspections: reports per year (if option A)	+/- 25		

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