



CONCERTED ACTION
ENERGY PERFORMANCE OF BUILDINGS

EPBD Key Implementation Decisions in Greece

Status in December 2016

AUTHORS

Andreas Androutsopoulos, Argyro Giakoumi, *Centre for Renewable Energy Sources and Saving*

NATIONAL WEBSITES

www.ypeka.gr, www.buildingcert.gr

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)	<p>Law 4122/2013 sets the obligation from 1/1/2019 new buildings occupied and owned by public authorities to be nearly zero-energy buildings.</p> <p>There is no further definition of what is considered to be a public building. Also, the definition of what is considered to be a NZEB is still pending.</p> <p>In specific, considering the definition of NZEBs there is a Steering Committee formed by Ministry of Energy & Environment (MEE) which among other things will:</p> <ul style="list-style-type: none"> - define the technical characteristics of buildings with nearly zero energy consumption, taking into account national, regional or local conditions, and including a numerical indicator of primary energy use in kWh/m²a - provide the evolution through time of the national requirements related to the energy performance of buildings - provide the energy characteristics of the buildings with nearly zero energy consumption. 		
1.2	Definition of public buildings used by the public (according to article 13)	<p>There is no specific definition for public buildings under the scope of article 13.</p> <p>According to the provisions of Law 4122/2013 from 9/7/2015 the requirement of all buildings that are used by the public sector and are visited by the public to issue an EPC and display it publicly, accounts also for buildings with a total area of 250 m² or more.</p> <p>Since no official registry for public buildings exists in Greece, the necessary information of public buildings is difficult to be accessed.</p> <p>In 2014, a list of 82 public buildings, owned by the organizations of the Central Government with a total useful</p>	The list of the 82 public buildings referred here is under the scope of Article 5 of EED, which concerns buildings owned and occupied by the central government.	

		floor area over 500 m ² was prepared. At the moment, the list is enriched with buildings with more than 250 m ² floor area and the data provided are processed. No controls are foreseen regarding the issuing and public display of EPCs.		
1.3	Number of residential buildings	3,246,008 number of residential buildings (2,990,324 buildings that have only residential use + 255,684 buildings of mixed use where the prevailing use is the residential one)	Another number that can be useful is the number of dwellings. A multi-family building can have e.g. 15 dwellings. According to the Hellenic Statistical Authority, the total number of dwellings was 4,122,088, census 2011.	
1.4	Number of non-residential buildings	The total number of non-residential buildings is 273,596 (209,469 + 64,127). The type of uses summed here are: Hotels + Schools + Office/ Commercial + Hospitals The first number accounts for buildings of single use while the second to buildings with mixed use, where the prevailing use is one of the above mentioned.	According to the National (Hellenic) Statistical Authority buildings can have the following types based on their use: Residential, Church/ Monastery, Hotel, Factory, School, Office/ Commercial, Parking, Hospital, and Other. For the needs of this document only the categories that are relevant with EPCs are summed. Source: Hellenic Statistical Authority, census 2011.	
1.5	If possible, share of public buildings included in the number given in 1.4	34,958 It accounts to 12,8% of the number indicated in 1.4.	The number indicated here concerns buildings where the owner is a public authority and their use is one of the following: Hotel, School, Office/ Commercial, Hospital. (Source: Hellenic Statistical Authority, census 2011).	

1.6	If possible, share of commercial buildings included in the number given in 1.4	<p>206,254 buildings characterized as Office/ commercial buildings (=153,510 +52,744). The first number accounts for buildings of single use while the second to buildings with mixed use, where the prevailing use is office/ commercial).</p> <p>It accounts to 75% of the number indicated in 1.4.</p>	Source: Hellenic Statistical Authority,													
1.7	Number of residential buildings constructed per year (estimate)	<table border="1" data-bbox="613 352 1088 821"> <thead> <tr> <th></th> <th>2014</th> <th>2015</th> <th>2016</th> </tr> </thead> <tbody> <tr> <td>Number of new buildings</td> <td>4,620</td> <td>4,618</td> <td></td> </tr> <tr> <td>Number of additions to existing buildings & refurbishments</td> <td>1,644</td> <td>1,772</td> <td></td> </tr> </tbody> </table>		2014	2015	2016	Number of new buildings	4,620	4,618		Number of additions to existing buildings & refurbishments	1,644	1,772			
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1.8	If possible, share of residential buildings constructed per year (estimate, included in the number given in 1.7)	<p>The numbers given here does not refer to buildings but to dwellings.</p> <p>Thus, it cannot be given as a share of the number indicated in 1.7.</p> <table border="1" data-bbox="613 999 1106 1157"> <thead> <tr> <th></th> <th>2014</th> <th>2015</th> <th>2016</th> </tr> </thead> <tbody> <tr> <td>Number of new dwellings</td> <td>9,619</td> <td>9,264</td> <td></td> </tr> </tbody> </table>		2014	2015	2016	Number of new dwellings	9,619	9,264							
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1.9	If possible, share of non-residential buildings constructed per year (estimate, included in the number given in 1.7)	<p>The numbers given here does not include exclusively new constructed commercial buildings but can also include permits for establishing a new commercial use to an existing building or additions to existing buildings etc.</p> <p>Thus, it cannot be given as a share of the number indicated in 1.7.</p>														

			2014	2015	2016			
		New commercial use	2,600	2,487				
1.10	Useful floor area of buildings constructed per year in million square meters (estimate)	The numbers given in 1.7 for newly constructed buildings in terms of useful floor area are given in the table below:						
			2014	2015	2016			
		Number of new buildings	(4,620) 1.4 m ²	(4,618) 1.3 m ²				

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	The national Regulation on the Energy Performance of Buildings has set minimum requirements (maximum U-values) for the building elements, as well as for the whole building envelope (max. U _{building}) and minimum requirements for the efficiency of heating, cooling, hot water production systems. All new buildings must be at least of Class B.		
2.2	Requirements for energy performance of non-residential buildings in current building code	Non-residential buildings have on top of the above-mentioned requirements additional ones for the lighting systems.	.	
2.3	Is the performance level of nearby zero energy for new buildings set in national legislation?	Not yet	The exact performance level for NZEBs is expected to be defined in the study of the Steering Committee, which is at the moment ongoing. Indicate where and how	
2.4	Nearly zero energy level for residential buildings (if set)	Not yet		
2.5	Nearly zero energy level for non-residential buildings (if set)	No yet		
2.6	Are nearly zero energy buildings (NZEB) defined using a carbon or environment indicator	No		
2.7	Year for nearly zero energy (NZEB) to be implemented for residential buildings	2021 for all new buildings (either residential or commercial) as set in Law 4122/2013		

2.8	Year for nearly zero energy (NZEB) to be implemented for non-residential	2019 for public buildings, 2021 for private buildings		
2.8	Is renewable energy a part of the overall or an additional requirement	Part of the overall.		
2.9	Specific comfort criteria for new buildings, provide specific parameters for instance for airtightness, minimum ventilation rates	No. Currently under revision.		

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 for existing buildings set in national legislation?	Not yet	To be defined in the ongoing study of the Steering Committee formed by MEE.	
3.2	Is the level of nearly zero energy (NZEB) for existing buildings similar to the levels for new buildings?	Not yet defined	To be defined in the ongoing study of the Steering Committee formed by MEE.	
3.3	Definition of nearly zero energy (NZEB) for existing residential buildings (if different from new buildings)	Not yet defined		
3.4	Definition of nearly zero energy (NZEB) for existing non-residential buildings (if different from new buildings)	Not yet defined		
3.5	Overall minimum requirements in case of major-renovation	When a building undergoes major-renovation must meet the minimum requirements of the National Building Regulation (KENAK) (that is Class B).		
3.6	Minimum requirements for individual building parts in case of renovation	Yes, if the existing buildings undergo major renovation.		

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		
4.2	Number of energy performance certificates per year (for instance average of 3 years)	In 2015 alone, a number of 282,462 EPCs were issued.		
4.3	Number of EPCs since start of scheme	Until the end of 2016, a total number of 946,700 EPCs have been issued according to the Energy Inspections Dept.		
4.4	Number of assessors	Building energy auditors: 13,635 Inspectors for Heating systems: 2,589 Inspectors for AC systems: 2,012		
4.5	Basic education requirements for assessors	Engineer or architectural degree.		
4.5	Additional training demands for assessors	Training seminars were available for assessors. Those assessors that have successfully passed the examination foreseen in article 9 of P.D. 100/2010 are categorized as Class C (highest) assessors.		
4.6	Quality assurance system	The Departments of Energy Inspection (of Northern and Southern Greece) of the General Directorate of Environment, Construction, Energy and Mineral Inspectorate are responsible for carrying out random EPC control checks and checks on specific EPCs after complaints. The checks include: a. control of the data inserted in the electronic database used for the EPC calculations b. on-site inspection of the building in order to verify the data used for the EPC.		

		<p>The quality check procedure utilises a tolerance of 5% from the total primary energy consumption of the existing building or variation of more than one energy class. Penalties to energy auditors are calculated according to a specially developed algorithm from the Departments of Energy of MEE, and covers all cases of issued penalties (according to art. 56, L. 4409/2016.</p>		
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5. KIDs for Inspection Systems

no	Key Implementation Decision - Inspection Systems	Description / value / response	Comments	Description
5.1	Is there a national database for heating inspections	Yes		
5.2	Is there a national database for cooling inspections / AC	Yes		
5.3	Are inspection databases combined with EPC database for registration of EPCs and inspection reports	Yes		
5.4	Chosen option A or B for heating systems (inspection or other measures)	Option A		
5.5	Number of heating inspections / reports per year (if option A)	<p>The official launch of the registry of the heating systems inspection reports took place in January 2016.</p> <p>Until the end of 2016, very few inspection reports for heating systems had been issued.</p>		
5.6	Chosen option A or B for cooling systems (inspection or other measures)	A		
5.7	Number of air-condition / cooling system inspections / reports per year	<p>Similarly, to the heating systems, the official launch of the registry of the air conditioning systems inspection reports took place in January 2016 and until the end of 2016 only a few have been reported.</p>		



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