CONCERTED ACTION
ENERGY PERFORMANCE OF BUILDINGS

EPBD implementation in Latvia

Status in December 2016

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1. Introduction

In Latvia, the implementation of the EPBD is the overall responsibility of the Ministry of Economics. The Ministry of Economics develops and implements the national energy efficiency policy, including the transposition of the EPBD. The necessary laws and regulations for transposing the EPBD were adopted at the end of 2014 and are currently all in force. This report presents an overview of the current status of the implementation of the EPBD in Latvia. It addresses requirements for the energy performance of buildings, for technical building systems, EPCs and inspections, and includes experiences with EPBD implementation as well as future plans.

The main legislative acts concerning the energy performance of buildings consist of:

- the Law on the Energy Performance of Buildings (*LEPB*) that was adopted in the Latvian Parliament *Saeima* and came into force on 9 January 2013[1];
- Cabinet Regulation No. 383 of 9 July 2013, "*Regulations regarding Energy certification of Buildings*" (Regulation No. 383)[2];
- Cabinet Regulation No. 348 of 25 June 2013, "*Building energy performance calculation method*" (Regulation No. 348)[3];
- Cabinet Regulation No. 382 of 9 July 2013, "*Regulations Regarding Independent Experts of Energy Performance of Buildings*" (Regulation No. 382)[4];
- Cabinet Regulation No. 339 of 30 June 2015, "*Regulations of Latvian Building Norm LBN 002-15 "Thermal requirements of the buildings envelopes*" (LBN 002-15)[5].

2. Current Status of Implementation of the EPBD

2.I. Energy performance requirements: NEW BUILDINGS

The minimum energy performance requirements for new buildings are laid out in LBN 002-15 which includes requirements for building envelope U-values, and in Regulation No. 383 including minimum permissible level of energy performance of buildings.

2.I.i. Progress and current status of new buildings

Before 1980, building envelope characteristics were based on calculations for preventing moisture from forming on the inner surface of the outer walls, and for preventing freezing through the walls. For properly constructed buildings, the envelope heat transfer coefficient U-value was usually less than 1.3 W/(m^2 K). From 1980 onwards, buildings were built in accordance with a formal USSR Standard for the thermal resistance of the envelope, e.g., improving wall U-values to 1.1 W/(m^2 K). Significantly more demanding requirements were adopted by the Ministry of Architecture and Construction of the Republic of Latvia in September 1991. Since 2003, the LBN 002-15 (approved in 2001 and tightened in 2015 following cost-optimal studies) has been in force. Requirements for the minimum permissible level of energy consumption for heating (amendments in Regulation No. 383) were set in 2015.

2.I.ii. Format of national transposition and implementation of existing regulations

The energy performance calculation methodology is applicable for new and reconstructed[6] or renovated[7] buildings, as well as for existing buildings. The energy performance calculation methodology is described in Regulation No. 348. The regulations have determined that the building energy performance calculation procedure shall include thermal comfort, indoor air quality, infiltration, thermal bridges and shading devices. The building energy performance class indicator corresponds to the value which was established according to the energy consumption used to heat the building. The energy performance calculation methodology is based on the corresponding CEN Technical Report CEN/TR 15615:2009 and on Standard EN ISO 13790:2008 conditions and includes references to the 16 other CEN standards. The energy performance calculation methodology uses the primary energy factor for the non-renewable part. Primary energy factor values are shown in Table 1.

No.	Energy carrier or energy source		Primary energy factor of non-renowable part, *f*p.
1.	Fuels	Diesel fuel	1.1
2.		Natural gas	1.1
3.		LPG	1.1
4.		coal (anthracite)	1.1
5.		brown coal (lignite)	1.2
6.		biogas	0.5
7.		wood	0.2
8.	Central heating system, thermal energy produced in cogeneration*	fossil fuel	0.7
9.		renewable fuel	0.0
10.	Central heating system, thermal energy produced without cogeneration	fossil fuel	1.3
11.		renewable fuel	0.1
12.	Electricity	from electrical power networks	1.5
13.		from fossil resources	2.0
14.		from renewable energy sources, which is produced within the borders of the technical building systems	0.0
15.	Wind, solar, aerothermal, hydrothermal and sea energy, hydraulic energy		0.0

* The value corresponds to a heat supply system with 70% output from cogeneration.

Table 1. Primary energy factor values in Latvia

2.I.iii. Action plan for progression to NZEB for new buildings

The definition of NZEB was transposed into Regulation No. 383 in 2013. A cost-optimal study in 2014 showed that the defined level of NZEB (30 kWh/m^2 for heating) was difficult to achieve for almost all building types and the NZEB level was far from being cost-optimal, as the cost-optimal levels (for heating) were between 80-90 kWh/m^2. Based on this conclusion, the NZEB definition was revised in 2015. Currently, the NZEB definition (40 kWh/m^2 threshold for residential buildings and 45 kWh/m^2 threshold for non-residential buildings) is a lot closer to the cost-optimal level. The amendments to Regulation No. 383 also included building class rescaling and a plan to reach the NZEB level for new buildings by 2021.

Currently, a building shall be classified as a NZEB if it meets all the following requirements:

- The 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.
- The total primary energy consumption for heating, domestic hot water supply, mechanical ventilation, cooling and lighting accounts for no more than 95 kWh/m^2.year.
- High-efficiency systems are used in the building, which ensure:
    - recovery of no less than 75% of the ventilation heat loss during the heating season;
    - the, at least partial, use of RES (RES>0).
- There is no low efficiency fossil fuel heating equipment installed in the building[8].

Building classes are presented in Table 2 and a plan to reach the NZEB level for new buildings is given in Table 3.

Class	comparative assessment scale (calculated energy rating for heating)	
	for residential buildings	for non-residential buildings
	kWh/m^2 per year	kWh/m^2 per year
A	Class A ≤ 40 kWh/m^2	Class A ≤ 45 kWh/m^2
B	40 kWh/m^2 < Class B ≤ 60 kWh/m^2	45 kWh/m^2 < Class B ≤ 65 kWh/m^2
C	60 kWh/m^2 < Class C ≤ 80 kWh/m^2	65 kWh/m^2 < Class C ≤ 90 kWh/m^2
D	80 kWh/m^2 < Class D ≤ 100 kWh/m^2	90 kWh/m^2 < Class D ≤ 110 kWh/m^2
E	100 kWh/m^2 < Class E ≤ 150 kWh/m^2	110 kWh/m^2 < Class E ≤ 150 kWh/m^2
F	150 kWh/m^2 < Class F	150 kWh/m^2 < Class F

Table 2. Building energy classes in Latvia

No.	Time period of approval of a construction intention (building permit documentation)	Minimum permissible level of energy performance of buildings, energy performance assessment for heating of new buildings			
		for residential buildings		for non-residential buildings	
		multi-apartment buildings	one-apartment or two-apartment buildings	buildings which are owned by the State and in the possession of the authorities and where the State authorities are located	other non-residential buildings
1	2	3	4	5	6
1.	Until 31 December 2016	≤ 70 kWh/m^2 per year	≤ 80 kWh/m^2 per year	≤ 100 kWh/m^2 per year	≤ 100 kWh/m^2 per year
2.	From 1 January 2017 to 31 December 2017	≤ 60 kWh/m^2 per year	≤ 70 kWh/m^2 per year	≤ 90 kWh/m^2 per year	≤ 90 kWh/m^2 per year
3.	From 1 January 2018 to 31 December 2018	≤ 60 kWh/m^2 per year	≤ 70 kWh/m^2 per year	≤ 65 kWh/m^2 per year	≤ 90 kWh/m^2 per year
4.	From 1 January 2019 to 31 December 2020	≤ 50 kWh/m^2 per year	≤ 60 kWh/m^2 per year	NZEB	≤ 65 kWh/m^2 per year
5.	From 1 January 2021 and hereinafter	NZEB	NZEB	NZEB	NZEB

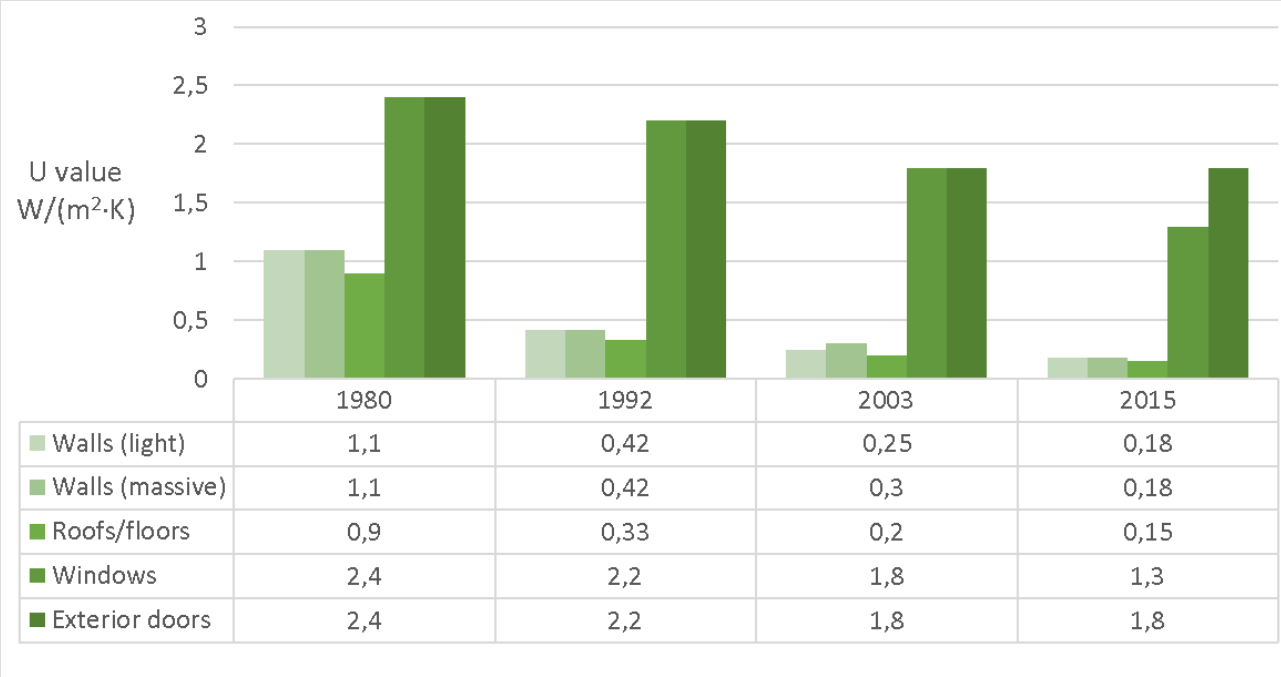
Table 3. Timeplan for reaching the NZEB level for new buildings.

2.I.iv. Requirements for systems and / or building components for new buildings

Design requirements for heating systems concern the minimum permissible level of the energy performance of buildings (Regulation No. 383) and for the envelope values (LBN – 002-15). Design requirements for hot water, cooling, ventilation and lighting systems are based on construction laws and the related building codes, with references to applicable standards. The design requirements for the primary energy level are set for NZEB only. Changes for the requirements of the building envelopes for residential buildings are shown in Table 4 and Figure 1.

Building components		1980	1992	2003	2015
Roofs and floors in contact with the outdoor air	W/ (m²·K)	0.90	0.25 - 0.40	0.2 k*	0.15 k
Floors on the ground		-	0.5	0.25 k	0.15 k
The outer wall of a mass of less than 100 kg / m²		1.1	0.33 - 0.50	0.25 k	0.18 k
The outer wall of a mass of less than 100 kg / m²				0.3 k	
Windows		2.4	1.9 - 2.4	1.8 k	1.30 k
Building exterior doors		2.4	1.9 - 2.4	1.8 k	1.80 k
Thermal bridges		-	-		
* Temperature factor **k** = $19/(T_{ind.} - T_{outd})$, depending on climate zones **k** for residental buildings is from 0,95 (Liepāja) to 1,09 (Alūksne)					
Approximate energy consumption for heating	kWh/m² per year	150 - 200	100 - 130	70 - 90	60 - 85

Table 4. Changes for the requirements of the building envelopes for residential buildings



	1980	1992	2003	2015
Walls (light)	1,1	0,42	0,25	0,18
Walls (massive)	1,1	0,42	0,3	0,18
Roofs/floors	0,9	0,33	0,2	0,15
Windows	2,4	2,2	1,8	1,3
Exterior doors	2,4	2,2	1,8	1,8

Figure 1. Changes for the requirements of the building envelopes for residential buildings

2.II. Energy performance requirements: EXISTING BUILDINGS

The energy performance calculation methodology for existing buildings is the same as for new buildings. Also, the requirements for the individual parts of the building envelopes are the same for renovations and for new buildings. Differences are in the minimum permissible level of the energy performance of buildings, with requirements shown in Table 5. Based on EPBD requirements, Latvian regulations allow for the minimum energy performance requirements not to be applicable to buildings under reconstruction or renovation, if the application of these requirements is not technically, functionally or economically feasible. In the latter case (economic feasibility), Regulation No. 348 provides calculations according to Standard EN 15459:2008.

No.	Time period of approval of a construction intention	Minimum permissible level of energy performance of buildings, energy performance assessment for heating of existing buildings undergo renovation.			
		for residential buildings		for non-residential buildings	
		multi-apartment buildings	one-apartment or two-apartment buildings	buildings which are owned by the State and in the possession of the authorities and where the State authorities are located	other non-residential buildings
1	2	3	4	5	6
1.	From 21 November 2015 and hereinafter	≤ 90 kWh/m^2 per year	≤ 100 kWh/m^2 per year	≤ 110 kWh/m^2 per year	≤ 110 kWh/m^2 per year

Table 5. Minimum permissible level of the energy performance of buildings.

2.II.i. Progress and current status of existing buildings

The minimum energy performance requirements for existing residential buildings, i.e., the permissible level of the energy performance of a building, which, if exceeded, obliges the building owner to undertake measures for the improvement of the energy performance, is determined in Cabinet Regulation No. 907 of 28 September 2010, "*Regulations Regarding the Survey, Technical Servicing, Current Repairs and Minimal Requirements for Energy Efficiency of the Residential House*"[9]. Regulation No. 907 states that the administrator of a multi-family residential building shall plan measures for improving the energy efficiency, including the renovation of the building, if the average thermal energy consumption (heating and domestic hot water) within the last three calendar years has exceeded 200 kWh/m^2 per year, or 150 kWh/m^2 per year if the heat is only used for heating.

2.II.ii. Plans to improve the existing building stock

In 2012, the Ministry of Environmental Protection and Regional Development started a project called "*Low Energy Buildings" (LEB)* within the Latvian governmental programme of "*Climate Change Financial Instrument" (CCFI*)[10]. The *LEB* project supported the construction of new buildings and the reconstruction of existing ones to achieve target values. Within the *LEB*, 14 different pilot projects were carried out for different building types. All projects were finished but could not be cost-efficient for the owner without an external source of financing (grants). Based on these results, minimum energy performance requirements are based on cost-optimal values only, which means that the NZEB level for existing buildings is not mandatory.

In the future, Latvia must contribute to common EU targets, e.g., a long-term 2050 goal of reducing greenhouse gas emissions by 80-95% compared to 1990. According to the "*Clean Energy for all Europeans*" package of amendments to the EPBD, Latvia will indicate a target to decarbonise its national building stock. This target will be included in Latvia's next long-term renovation strategy (next strategy update will be made in 2020).

2.II.iii. Regulation of system performance, distinct from whole building performance

Design requirements for the heating system concern the minimum permissible level of the energy performance of buildings (Regulation No. 383), as well as envelope values (LBN – 002-15). Projecting requirements for domestic hot water, cooling, ventilation and lighting systems are based on construction laws and the related building codes, with references to applicable standards. The projecting requirement for the primary energy level is set for NZEB only.

2.II.iv. Encouragement of intelligent metering

In 2015, Latvia amended Cabinet Regulation No. 876 of 21 October 2008, "*Regulations Regarding the Supply and Use of Thermal Energy*". The amendments state that in multi-family apartment buildings and non-residential buildings in which residents must mutually divide the bill for the consumed thermal energy, the authorised person shall divide the amount of consumed thermal energy using measuring devices installed in each apartment. If the use of such measuring devices is not technically possible or profitable, heat-cost allocators shall be used. This requirement shall be fulfilled for buildings that received their building permit after 1 January 2016 and whose thermal energy is provided from a central source.

2.II.v. Financial instruments and incentives for existing buildings

Funding activities for buildings during the period 2014 – 2020 include:

- activities to promote the efficient use of energy resources, reducing energy consumption and transitioning to RES in the manufacturing sector[11] (grant programme for industrial and commercial sector building renovations);
- activities to promote energy efficiency in residential buildings[12] (grant programme for multi-residential sector building renovations);
- activities to promote energy efficiency in state buildings[13] (renovation programme to ensure the target fulfilment of Directive 2012/27/EU for central government buildings);
- activities to promote energy efficiency in local municipality buildings[14] (renovation programme to ensure the target fulfilment of Directive 2012/27/EU for local government buildings);
- emission allowances auctioning tool[15]
    - greenhouse gas emissions reduction – activities for low-energy buildings (programme to promote NZEB and the exemplary role of public buildings);
    - greenhouse gas emissions reduction of national significance for protected architectural monuments (specific programme for renovations of architectural monuments);
- other activities which include building renovations[16].

2.II.vi. Information campaigns / complementary policies

A campaign named "*Living warmer*"[17] for promoting the energy performance of buildings in Latvia (Figure 2) has been running since 2010. The key objective of the "*Living warmer*" campaign is to inform households about the existence and the conditions of support programmes in the EU 2007-2013 and EU 2014-2020 planning periods. More than 200 informative events have been held throughout Latvia, which included a variety of public debates, seminars, conferences and exhibitions, involving more than 8,500 participants in total.

Figure 2. "Living warmer" campaign.

Since 2011, the competition "*Energy efficient building in Latvia*"[18] has been held to promote the good practice of implementing energy efficiency in the building sector, as well as implementing energy-efficient building construction, renovation and reconstruction.

The Energy Efficiency Center[19] of the public energy generation company *JSC Latvenergo* and *Zemgales* Regional Energy Agency[20] advise the public and private sectors about ways to use electricity and heating energy efficiently.

The Energy Efficiency Information Center of Riga's municipality agency organises seminars on the quality of renovations and provides information and advice about energy efficiency, including free advice about preparing applications for renovations and energy audits.

2.III. Energy performance certificate requirements

The certification of the energy performance of a building is performed:

- for a building to be constructed, reconstructed or renovated, in order to accept it for service or to sell;
- for an existing building or building unit, in order to sell, rent or lease it, if the certification of the energy performance is requested by the purchaser, tenant or lessee;
- for an existing public building in the state or local government ownership, the heating area of which exceeds 250 m^2;
- upon request by the building owner.

2.III.i. Progress and current status on sale or rental of buildings and EPCs

Latvia is currently amending the *LEPB*, which includes improved requirements for EPC issuing and sanctions.

2.III.ii. Quality Assurance of EPCs

The *Building Information System (BIS)*, which is an electronic site that brings together all the information about the construction process and the parties involved, including a *Register of Independent Experts in the Field of Energy Performance of Building*s and a *Register of Certificates of Energy Performance of Buildings*, has been implemented since 2016. As of October 2017, 4,936 EPCs or temporary EPCs have been issued. Regulation No. 382 states that the *State Construction Control Office* analyses data registered in the *BIS* (EPCs and temporary EPCs, as well as heating and AC system inspection reports) and periodically selects documents of independent experts for random testing purposes. According to the regulation, the control office also designates an appropriate certification authority to inspect the selected documents. Also, for every project claiming European funding, energy performance compliance is required. In any other building, if a complaint is received, the certification body must check the EPC, energy audit or inspection report received by the qualified experts. In case of a violation, the certification body could apply penalty points.

2.III.iii. Progress and current status of EPCs on public and large buildings visited by the public

The obligation to issue an EPC for public and large buildings visited by the public is only mandatory if the building owner is the central or local government. State building certifications are still in process. At this point, 30% of state-owned government buildings have an EPC. The delay in implementation is due to the fact that the activity to promote energy efficiency in state buildings[13] had only started at the end of 2016, with the EPC being one of the requested documents. Issuing an EPC is rational and cost-efficient when the building is participating in the aforementioned programme.

2.III.iv. Implementation of mandatory advertising requirement – status

The *LEPB* decrees that advertisements for the sale, rent or lease of any building or building unit should display the energy performance indicators of the building or building unit if the certification of the energy performance of the building has already been performed in accordance with the procedures specified in this law. This requirement is not fully effective, as there is no penalty system. Latvia has been developing a more ambitious penalty system since 2017.

2.IV. Inspection requirements – heating systems, air conditioning

Inspection requirements are included in the *LEPB* and in Regulation No. 383. Latvia has implemented an inspection scheme based on the requirements in EPBD Article 14 and Article 15, points 1, 2, and 3.

2.IV.i. Report on equivalence of model A and B for Heating Systems

Cabinet Regulation No. 383 determines that the inspection of boilers and heating systems is mandatory for heating systems with a boiler with an effective rated output of over 20 kW, as well as for AC systems with an effective rated output of over 12 kW. The inspection of boilers must be done in accordance with Standard LVS EN 15378:2009 L, "*Energy performance of buildings: Inspection of boilers and heating systems*"[21]. The inspection of AC systems must be done in accordance with Standard LVS EN 15240:2009 L, "*Ventilation for Buildings -Energy performance of buildings: Guidelines for the inspection of air-conditioning systems*"[22].

2.IV.ii. Progress and current status on heating systems

There are only 18 registered inspection reports in the *BIS* (data from April 2017). This indicates that the current inspection scheme is an ineffective tool which requires improvement. One possible reason for this insufficiency is a lack of control mechanisms. However, if the inspection scheme gave significant improvements, the free market would already have adopted it, regardless of whether or not control mechanisms were in place. The main obstacle could be the fact that improvements for small buildings (with a threshold of 20 kW for heating and 12 kW of AC) are usually not cost-efficient; thus, issuing an inspection deed is more of a burden than a potential gain. Another possible reason is that the EED audit scheme and the EPC inspection scheme partly overlap, thereby giving the impression that an inspection is an unnecessary financial burden. The Ministry of Economics aims to revise the current inspection scheme before the new EPBD transposition deadline.

3. A success story in EPBD implementation

With an aim to digitalise the documentation of the entire construction process, Latvia has intorduced the *BIS* which also offers public access to the *Register of Independent Experts in the Field of Energy Performance of Building*s and the *Register of Certificates of Energy Performance of Buildings.* This digitalisation process lessens the administrative and paperwork burden involved with the certification of qualified experts, as any new information is always available online for anyone to check. Implementing the *BIS* will give access to better statistical data and lead to a better understanding of how requirements work in practice.

As explained in the second section of this report, Regulation No. 907 determines the permissible level of the energy performance of a building, which must not be exceeded, lest the building owner be obliged to undertake measures for its improvement. Buildings that exceeded this level were identified in the past, with the relevant building owners receiving informative letters. This is not intended as a punishable clause and no penalties have been applied so far. It gives the administrator of a multi-apartment residential building the possibility to take mandatory actions without having to go through the usual voting procedure required of apartment owners. This is however only possible in cases where the average thermal energy consumption of the residential house within the last three calendar years has exceeded 200 kWh/m^2 per year, or 150 kWh/m^2 if the heat is only used for residential building heating. In some cases, this requirement can trigger the need for complex renovations; in other cases it will only trigger a single measure, for example, a simple change to the attic insulation. Still, this does not allow a multi-family building administrator to start a large-scale renovation that would have significant financial implications without the owners' consent. The consent through the owner voting procedure remains necessary if the improvement of the energy performance system would require a building permit from a building authority.

This mechanism is very effective for multi-family buildings where small-scale energy performance improvements are required and it is difficult to get all owners' consent. Also, it is an effective tool for encouraging the building administrator to start actively informing apartment owners about the benefits of energy performance and the need to improve it, as well as to trigger the owner voting procedure for large-scale renovation works, especially in cases where the administrator only does the bare minimum.

4. Conclusions, future plans

Latvia will develop further policies and take additional measures to improve the existing legal framework for the energy performance of buildings.

Latvian short-term plans are:

- to improve quality assurance systems with random EPC quality checks (in 2017);
- to create a more ambitious sanctioning system for issuing EPCs (during 2017-2018);
- to plan a revision of the qualified expert monitoring scheme (during 2017-2018);
- to carry out second cost-optimal calculations (during 2017-2018);
- to implement a new CEN standards package (during 2018-2019).

Latvian mid- and long-term plans are:

- to take measures to increase the number of NZEB based on NZEB requirement realisation and second cost-optimal calculation results, as well as to consider possible changes to definitions and requirements;
- to implement EU's *Clean energy for all Europeans* package (amendments to the EPBD);
- to define targets for the decarbonisation of the national building stock and integrate them in the next long-term renovation strategy;
- to plan a revision of the inspection schemes.

Endnotes

1. https://likumi.lv/doc.php?id=253635
2. http://vvc.gov.lv/image/catalog/dokumenti/Cab.%20Reg.%20No.%20383%20-%20Regulations%20Regarding%20Energy%20Certification%20of%20Buildings.docx
3. http://vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab._Reg._No._348_-_Calculating_the_Energy_Performance_of_a_Building.pdf
4. http://vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab._Reg._No._382_-_Independent_Experts_of_Energy_Performance_of_Buildings.doc
5. https://likumi.lv/ta/id/275015-noteikumi-par-latvijas-buvnormativu-lbn-002-15-eku-norobezojoso-konstrukciju-siltumtehnika-
6. Reconstruction or construction work as a result of changes to the dimension of a structure or a part of a structure, or as a result of the strengthening of the load-bearing elements with or without changing the type of use.
7. Renovation or construction work as a result of changes to the load-bearing elements of a structure, or if functional or technical improvements have been performed without changing the dimension of the structure or the load-bearing capacity of the elements.
8. Control-checking decisions are left to qualified experts. Usually the existing building equipment parameters are compared with new equipment parameters available in the market. If the installed equipment is significantly less efficient than what is available in the market, the requirement is not fulfilled and the building is classified as Class A level but is not considered an NZEB building.
9. http://vvc.gov.lv/image/catalog/dokumenti/Cab.%20Reg.%20No.%20907%20-%20Survey%20of%20the%20Residential%20House.docx
10. www.varam.gov.lv/lat/darbibas_veidi/KPFI/projekti/?doc=11775
11. http://cfla.gov.lv/lv/es-fondi-2014-2020/izsludinatas-atlases/4-1-1
12. www.altum.lv/lv/pakalpojumi/energoefektivitate/

13. www.cfla.gov.lv/lv/es-fondi-2014-2020/izsludinatas-atlases/4-2-1-2-k-1

14. www.varam.gov.lv/lat/likumdosana/normativo_aktu_projekti/2014__2020_gada_eiropas_savienibas_fondi/?doc=21705

15. http://varam.gov.lv/lat/fondi/ekii/projekti/

16. www.esfondi.lv/sakums

17. https://em.gov.lv/lv/es_fondi/dzivo_siltak/ievads/

18. www.energoefektivakaeka.lv

19. www.latvenergo.lv/lat/klientiem/EEC/

20. www.zrea.lv/

21. www.lvs.lv/lv/products/26634

22. www.lvs.lv/lv/products/26646

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