

Let's improve the quality of life in our buildings together!

DECLARATION

on the Improvement of the Latvian Long-term Strategy for Building Renovation for 2014–2020

Within the project BUILD UPON, which is implemented under the EU Framework Programme Horizon 2020, the Latvian Sustainable Building Council (LSBC) has collected recommendations for the new edition of the Long-term Strategy for Building Renovation for 2014–2020¹; the Ministry of Economics of the Republic of Latvia shall submit the updated strategy to the European Commission until late April 2017. These recommendations is a result of seven BUILD UPON public activities that took place from February to November 2016 and gathered more than 300 representatives of the State and municipal institutions, higher education institutions, NGOs, private sector and mass media. All 43 recommendations fall into 10 thematic groups and are related to the trends in renovation of municipal, commercial and residential buildings.

The goals of the Declaration on the Improvement of the Latvian Long-term Strategy for Building Renovation are as follows:

1. To promote quality and cost-efficient building renovation on a large scale that complies with high energy efficiency standards, thus providing for restoration of the Latvian residential, commercial and public building stock in high quality.
2. To improve quality of the construction process starting from the procurement until the building is put into operation and including ensuring planned energy efficiency.
3. To boost the standard of living in Latvia by improving building quality and increasing energy efficiency, along with more active engagement of the society in building renovation and management and raising public awareness of the advantages of energy-efficient and sustainable buildings.
4. To encourage application of new models and initiatives for financing renovation, including by attracting private investment as a source of additional financing in order to promote targeted investments in building renovation in Latvia for at least the coming 10–20 years and in order to ensure successful energy efficiency politics in the long run.
5. To guarantee a considerable increase in building energy efficiency and quality in order to comply with the EU goals for 2030, to reduce the energy cost gap between Latvia and other Baltic Sea countries and to ensure stable energy price and delivery in the long term, thus increasing Latvia's energy independence.
6. To foster State's more active participation in renovation by developing and introducing a step-by-step action plan for the implementation of the Latvian Long-term Strategy for Building Renovation and by providing for a simple and understandable legislative basis for an effective realisation of renovation.

Building renovation in Latvia. Building renovation and raising of energy efficiency in Latvia date back to 2003 when Latvia and the whole Eastern Europe gained its first experience by studying the German practices. Currently large-scale activities for improving the building energy efficiency are being implemented in Latvia using the EU funds. However, the overall level of renovation is still not sufficient. Doubts about successful and high-quality realisation of a project often hinder implementation of building renovation projects. Putting the residential stock in order is an equivocal process containing many unknown quantities—what to do and how to do that so as to get the best results? We can copy the foreign experience only partially because our climate, mentality, traditions, customs, financial possibilities and future visions differ. The people involved in the renovation of residential stock in various countries share a common understanding that an energy-efficient house means cheaper maintenance and more resource-independent lifestyle.

¹ Ministry of Economics of the Republic of Latvia. Long-term Strategy for Building Renovation for 2014–2020. Riga, 2014. Available: https://ec.europa.eu/energy/sites/ener/files/documents/2014_article4_lv_latvia.pdf

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While sustainable building aims at significant minimisation of the environmental impact of construction and maintenance throughout a building's life-cycle². Sustainable and energy-efficient buildings must provide pleasant environment where health is protected, which means that appropriate microclimate is of importance.

Many countries have adopted their own national green building standards. In addition, there are several international standards allowing comparison of the sustainability of buildings and urban environments across different countries and even continents. Sustainable building as the desired and favourable direction of construction in Latvia is also promoted by several national-level documents, e.g. the Latvian National Development Plan for 2007–2013 and construction regulatory documents, like the Construction Law which recognises green building as one of the basic construction principles. More and more Latvian municipalities adhere to the green procurement principles in planning and construction projects and stick to sustainable construction guidelines. There is no doubt that the principles of green construction are of the utmost importance when renovating as it ensures longer, better quality and cheaper maintenance afterwards.

The Long-term Strategy for Building Renovation. Pursuant to the 2012 Energy Efficiency Directive, all EU Member States have to develop a national renovation strategy or a long-term strategy for the renovation of residential, commercial and public buildings in line with high energy-efficiency standards. Following the elaboration and submission of these strategies to the European Commission until 30 April 2014, they have to be updated and improved every three years. The next term for submitting an updated strategy is **30 April 2017**.

Renovation or heat insulation of **multi-dwelling buildings** is also supported by the EU during the Programming Period 2014–2020; therefore, strategy for building renovation is of special importance. A total of 166,470,588 euro has been allocated for this goal, including the ERDF financing amounting to 141,499,999 euro and the State financing which equals 24,970,589 euro. According to the schedule, the first co-financed insulation projects will be launched in 2017, and as a result of insulation works energy efficiency of 13,476 households will be improved by 31 December 2023, according to the indicators to be obtained.

At the same time the total public financing available for raising of energy efficiency, application of smart energy management and use of renewable energy sources in the **public buildings** in 2014–2020 amounts to 82,619,415 euro, including 70,226,502 euro provided by the ERDF and 12,392,913 euro—by the State.

In order to reduce the primary energy consumption by facilitating improvement of energy efficiency and reduction of municipal costs for heat supply and by investing in **municipal buildings** it is planned to spend a minimum of 55,289,876 euro during 2014–2020; this sum includes 46,996,394 euro allocated by the ERDF and the budget support in the amount of 8,293,482 euro.

Industrial buildings will be granted a total of 38,300,036 euro, consisting of 32,555,030 euro from the Cohesion Fund and the private financing amounting to minimum 5,745,006 euro; this money will be used for improving energy efficiency, certification of energy performance of buildings and raising energy efficiency during construction, as well as for the purchase and installation of modern and efficient heating and hot water production units utilising renewable sources.

A targeted long-term strategy for building renovation shall include clear energy efficiency goals and provide for the coordination of the current initiatives so that obstacles to quality deep renovation are easier to overcome. New initiatives that bring about active engagement of the society and sector actors along with the enrichment of knowledge and skills and that enable construction entrepreneurs and employees to carry out high-quality renovation and introduce new financing models and innovations are always welcome. A targeted and practical long-term strategy for building renovation can have a positive impact on the activities undertaken by the State and municipal institutions and population in general ensuring that modern and quality living conditions are guaranteed in our buildings. Latvia as one

² Definition provided by the "Passive House Latvija".

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of the 175 countries having signed the Paris Agreement within the United Nations Framework Convention on Climate on 22 April 2016 shares responsibility for the global reduction of greenhouse gas emissions by contributing to the mitigation of climate change. Moreover, the EU Energy Efficiency Directive states that 30 % improvement in energy efficiency shall be ensured by the year 2030 along with 40 % cuts in greenhouse gas emissions. Furthermore, the building energy consumption is the one accounting for 40 % of the global greenhouse gas emissions while the renovation is still very slow—just some 1 % a year³. Taking into consideration that the condition of the largest share of the soviet and also historical buildings in Latvia is unsatisfactory and these buildings need renovation, Latvia has a great potential for reaching the aforementioned indicators in order to provide for quality living conditions and modern energy efficiency indicators.

Recommendations for the Improvement of the Long-term Strategy for Building Renovation for 2014–2020

1. Improvement of building quality to ensure long-term operation

The ultimate goal of the Long-term Strategy for Building Renovation shall be safe building stock where aspects of health are taken into account. Building renovation makes it possible to reduce the impact of toxic materials on human health, to improve air quality and to increase the strength of construction elements along with the fire safety. To upgrade the building quality, comfort indicators must be considered in relation to temperature, humidity, oxygen and CO₂ concentration in room, as well as the amount of volatile organic compounds generated by construction materials and equipment.

Thus, **the Latvian Building Standards together with the technical regulations should be enhanced providing for a thorough assessment of the overall technical condition of a building and taking of the necessary measures to strengthen the bearing structures and improve the fire safety, indoor microclimate and other important building constituents. To comply with the common standards and simplify the construction process, the pending introduction of Construction Information System and upgrading of its functions should be continued.**

Application of a complex approach to the renovation of buildings starting from procurement procedures and project development to putting the building into operation and achieving the design energy efficiency should be ensured in order to guarantee the quality of the renovated buildings, improvement of living conditions and significant increase in the value of our building stock.

2. Providing for quality renovation works throughout whole renovation

The Long-term Strategy for Building Renovation and the related measures shall present useful and usable information together with practical suggestions to the society, prepared by national experts and organisations so as to clarify the benefits brought about by a correct renovation. **To reach this goal, the legal framework regulating construction must be enhanced in line with the principles of design safety, sustainability, accessibility, acoustics and energy efficiency and taking into account the public interest, environmental protection requirements and scientific developments; in addition, the technical requirements applicable to structures must be reviewed and the participants of the construction process should be defined by specifying their duties, functions and responsibility.**

³ The European Commission. Press Release “Clean Energy for All Europeans—unlocking Europe's growth potential”. Brussels, 30 November 2016. Available: http://europa.eu/rapid/press-release_IP-16-4009_lv.htm

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Raising of construction specialists' competence pursuant to the requirements of nowadays market is essential for guaranteeing a quality construction and renovation. **Vocational and higher education training programmes and the technical provisions must be reviewed and updated, including improvement of the current education programmes, in order to satisfy the requirements of a modern, energy-efficient and sustainable construction.** At the same time, representatives of the State and municipal authorities should be trained about energy-efficient and sustainable building renovation just like all construction entrepreneurs, architects, project managers and other specialists involved in building renovation in the future.

Raising the renovation quality requires professional construction project and work management and implementation, as well as setting of clear responsibilities for and insurance of the works done. In addition, attention should also be paid to the initial project development stage—carrying out of energy audit, technical inspection and proper quality of technical projects. Besides, it is recommended to accredit construction companies if they comply with strict criteria in relation to personnel qualification and professional experience: that would guarantee high-quality construction work along with quality construction supervision by enforcing specific regulations, resulting in energy-efficient renovation.

Moreover, a register of construction specialists must be established and requirements for architects and construction engineers must be updated to ensure evaluation of their professional competence and compliance.

It would be easier to improve energy efficiency if the State and municipal organisations provided for the possibility to ensure daily supervision of compliance with the energy efficiency requirements and standards and if building managers and users were trained in monitoring energy efficiency especially after the renovation. Liepāja is one of the cities and towns in Latvia where such practice has been implemented.

The public procurement in construction must be based on the criteria of green procurement and quality instead of quantity (or the lowest price), contrary to the current practices. **The public procurement system for construction must be improved by setting common guidelines for organising State and municipal public procurements in construction field and by introducing the most economically advantageous criteria for implementing environment-friendly renovation in public procurements.** Competition regulations and the awarded contracts should include measures for ensuring the quality control of works.

In terms of assessing the effectiveness, renovation should be carried out at block level as a minimum in separate cases, for example in Riga. Such an approach makes it possible to receive quantity discounts on materials and work and to invest in the industry technology and knowledge with an aim to raise the efficiency and quality of works. Thus, a block or a part of the soviet developments would grow into modern living environment over a foreseeable period both from the engineering, technical, ecological, aesthetical and functional point of view.

In order to ensure building operation for at least the next 50 years, long-term investments in renovation must be made to streamline the work quality.

3. Use of quality construction materials in building renovation

To experience higher renovation quality, the project quality shall be improved, especially in relation to the requirements set for construction products and by paying more attention to the declared performance and installation of construction products. It is important to guarantee that the materials selected by customer, architect and engineers are the ones used in construction. In this regard, construction managers and supervisors have crucial roles as they are responsible for approving installation of a particular construction product in a structure. Therefore, an optimum control system for realising a construction project should be established and the overall level of building inspectors' competence should be enhanced.

The legal framework regulating the circulation of construction products must be reviewed in accordance with the new EU initiatives in the field of assessing the conformity of construction products.

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Another aspect is that the system for construction control and supervision of construction product market should be enhanced by revising the functions delegated to the State and municipal institutions in order to raise their efficiency. To achieve this goal, the cooperation between the Consumer Rights Protection Centre (CRPC), the State Construction Control Bureau and those institutions that are responsible for certification of construction specialists and construction products must be strengthened, so that the CRPC would be able to take urgent measures if any non-compliance is established.

To provide for better information about construction products requirements, a platform offering detailed information should be developed along with the so-called black list of improper construction materials.

4. Raising of building energy efficiency for the overall improvement of welfare and solving of social and economic problems

Energy is more expensive in Latvia than in our neighbouring country Estonia or the substantially richer Scandinavian countries—Denmark, Sweden, Finland, Iceland and Norway—or separate EU countries like Luxemburg, Malta and Slovenia, although our purchasing power is considerably lower⁴. And the sum consumers pay for using energy resources is still growing.

Achieving higher energy efficiency in our buildings would help us solve certain social problems. Renovation along with other energy efficiency related activities would improve the economic situation of many households. Moreover, better and more energy-efficient buildings have a positive impact on human health and reduce spending on health. Installation of effective building insulation both aids the reduction of fossil fuel consumption and cuts greenhouse gas emissions that affect the quality of the air we all breathe. But proper and efficient heating and ventilation systems play a part in eliminating the negative impact caused by humidity and insufficient indoor air exchange.

The security of energy supply is affected by the depleting natural resources, environment protection problems which are related to fossil fuel extraction, growing number of global population, and problems related to the use of alternative sources of energy. All of that may arouse uncertainty about secure energy supply now and also in the long run. Considering that energy price is only growing, targeted renovation might ease ensuring of a stable price level by decreasing consumption and thus also costs. Bigger savings of energy sources would strengthen Latvia's independence from imported energy and offer additional economic benefits.

Energy-efficient real estate has become a priority in improving the life quality in many parts of Europe. Also the overall EU 2030 targets which are binding upon Latvia provide for about 30 % energy savings, at least 27 % share of renewable energy consumption, and a 40 % cut in greenhouse gas emissions. If these targets are achieved, we will be able to ensure the stability of energy supply over a longer period, by guaranteeing secure energy supply and by reducing our dependence on imported energy sources.

In order to arouse public interest about energy efficiency and how it affects real estate, **the public online database of energy performance certificates of the Construction Information System must be linked with the real estate market so that anyone interested in real estate transactions might find information about a building's energy efficiency easily.**

The public understanding about advantages of energy performance certificates must be raised by engaging also real estate salespersons. Public trust in energy performance certification can be improved by easing the bureaucratic burden and upgrading the quality control of these procedures.

Higher awareness of construction workers and the society about energy efficiency measures and building access

⁴ The Eurostat, data from the second quarter of 2015.

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requirements together with a certification system for building energy performance would add to the raising of building energy efficiency.

It is of importance to foster introduction of innovations and recent scientific developments to construction thus securing the overall sector progress and increased energy efficiency of buildings; in this regard it is also vital to strengthen the cooperation between construction scientists and entrepreneurs with the aim to develop new technologies and materials thus advancing the competitiveness of local manufacturers and promoting use of energy-efficient materials along with renovation and construction of more energy-efficient buildings.

5. Participation of the State and municipalities in renovation

Although the main actors in sustainable construction come from the private sector, State institutions should actively participate in this process to speed up market transformation as it brings about many social benefits, including secure energy supply, raising of skills and expertise, etc. Energy-efficient renovation and sustainable building would make Latvian cities and towns more attractive to locals and foreign tourists, and would also help to hold on to the professionals Latvia needs so much (like doctors and health care workers, scientists, engineers, etc.), as well as it would encourage those Latvians who have left the State to return. It would also cut the health care costs taking into account the overall improvement of building quality and the related public health.

The strategy shall include specific national level initiatives for the improvement of energy efficiency at State- and municipality-owned real estates for at least the next three years along with action plans for implementing them. To facilitate renovation of multi-dwelling and industrial buildings, concrete government initiatives are necessary to support private sector taking into consideration the wear of residential building stock in need for renovation and the social issues.

Taxes for co-owners of multi-dwelling houses should not be raised at least while the credit is paid back, for example by freezing the building cadastral value until the credit is repaid or by granting tax incentives to reduce the risk that credit is not paid back and to ensure stable living standard.

Dwelling owners should assume responsibility for their buildings and effective management thereof and this can be encouraged by stating that the owner is responsible for the technical condition of a building and for energy consumption. Hence laws and regulations and work with people who own dwellings should be improved, including by applying innovative methods. In addition, the decision making process in relation to the renovation of multi-dwelling buildings must be simplified.

In order to promote quality renovation, the laws regulating the ownership of land under multi-dwelling buildings must also be put in order.

High energy efficiency and living quality can be reached by using a variety of initiatives for supporting those buildings where renovation has been carried out in high quality compared to the buildings where the requirements have not been met. For instance, immovable property tax reliefs could be granted for the buildings that have undergone quality renovation and reached high energy efficiency results.

6. Application of innovative financial instruments and use of private financing

Being aware of the need to attract additional financing, including private investment for building renovation, the European Commission has launched a new initiative "Smart Finance for Smart Buildings", which is a key to successful energy efficiency politics. By 2020, this initiative could facilitate influx of up to 10 billion euro into the national economies coming from the public and private funds.

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Taking into consideration the amount of necessary renovation and the current challenges resulting in the need for targeted investments in Latvian building renovation for the coming 10–20 years **in addition to targeted and efficient national initiatives, different EU and private resources must be attracted actively and new possibilities and financing models must be applied by taking over the best practices from other countries and adapting them to the situation in Latvia.**

The market should be supplemented with new and efficient financial instruments that are available to those who want to renovate their own buildings by using sustainable and energy-efficient construction methods. In this regard, taking advantage of new financial initiatives for promoting energy-efficient renovation, ESCO models, green loans (mortgages), establishment of rotation funds, and other methods should be assessed.

Green loans and mortgages might provide for even more favourable conditions thus facilitating attraction of private investment at the very beginning of a project when investment is most necessary. Loans for sustainable renovation and construction pose less risk to commercial banks and owners as they cut the costs and create more confidence thus reducing the risk of not repaying.

Being aware that it is unclear whether the EU financing will be made available for renovation works after 2020, **the State and municipalities must work to attract private investment by supporting innovative pilot projects** (for example, “The Great Wall of China” in Ziepniekkalns, Riga) **and by ensuring they comply with the principles of sustainable and energy-efficient renovation.**

State and municipal energy suppliers should provide the consumers with instruments for raising the building energy efficiency, which results also from the Energy Efficiency Directive.

At the same time, **the legal framework of energy efficiency contracts should be developed in order to encourage partnerships with ESCOs that use energy savings to find solutions for renovation without an initial investment/payment by the building owner.** These initiatives must be supported with public information campaigns.

7. Ensuring of resource efficiency

Construction sector is among the largest producers of problematic waste that is either taken to a landfill or a dump. However, construction sector also contributes to the circular economy: efficient use of resources allows economically beneficial construction waste management. The waste also can be used in production and in projects implemented by other sectors, thus exploiting the environmental protection possibilities offered by circular economy. The declaration by the Government of Latvia lays down that circular economy shall be promoted by adhering to EU regulations.

The Long-term Strategy for Building Renovation shall guarantee observing of environmental protection principles and resource saving by using the approach of circular economy⁵.

Monitoring of construction waste disposal must be carried out and the responsible construction companies, construction supervisors and construction waste managers must be motivated to ensure that construction waste is either taken to landfills or recycled instead of being taken to our woods or elsewhere thus polluting the nature. Re-use of construction waste should also be encouraged by making it one of the criteria in the public procurement.

Learning from foreign experiences, our people and organisations should be provided with the possibility to ensure reusing of construction materials.

⁵ Circular economy includes many problematic aspects of science, technologies and sustainable society. The circular economy is based on the idea that is necessary to switch from the linear economy to an economic model in which resources are preserved and used in a sustainable manner thus creating basis for bio-economy.

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Moreover, building life cycle analysis should be provided for at least the most important structural elements and engineering systems of a building. Building design, construction and renovation must be based on the principles of sustainability by using the optimum type and amount of materials resulting in minimum amount of waste and easing the possibility of building restoration and by providing for the re-use of construction materials.

8. The power of best practices

Example buildings that inspire others shall be supported. Such projects are necessary to provide examples of best practices that can be repeated by others. Innovative solutions are needed to foster State-, municipality- and privately-initiated renovation. **Example buildings can show the benefits of sustainable and energy-efficient renovation in practice thus earning a justified trust in construction sector.**

By raising the quality of our schools, universities, hospitals and other public buildings through ensuring their sustainability and improving the environment, we can enhance the education quality and health as well as hold on to the professional education sector employees and health care professionals. Deep renovation of buildings opens door to introduction of modern solutions, like setting up of optical internet and use of smart construction technologies, providing our society with the world's best technologies for increasing work capacity and raising life quality.

The best practices can be popularised through a shared database (which includes renovation projects of standard design buildings and construction documents so that these projects can be used as best practices) by using some of the current platforms, like BIS 2.0.

At the same time, negative examples of renovation should also be used to learn from and avoid mistakes.

9. Public awareness

The Latvian Long-term Strategy for Building Renovation must facilitate public awareness campaigns like "Let's Live Warmer" and campaigns in mass media (online, radio, TV, press, advertising, etc.) in order to arouse interest of all the involved market players and especially of the end users about deep and sustainable renovation by offering objective, direct and easy-to-understand information on the benefits brought about by energy-efficient renovation and sustainable construction.

Attention should be paid to the interests of particular target groups and specific renovation-related topics, and this information must be presented in an understandable language. **Municipalities should also be involved in this process by organising discussions about specific renovation-related issues, like sustainable construction, energy efficiency, indoor microclimate and health, building operation, etc., and by encouraging experience exchange between municipalities to provide for sharing of the best practices.** Information about various renovation models, including ESCO and financing possibilities must be provided to the society.

Renovation success stories should be collected and disseminated to inform society on both sustainable renovation and benefits brought about by it, and the bad experience to learn from it and avoid similar mistakes in the future. The society should also be actively addressed through social media.

The principle of one-stop-shop must be implemented in all regions of Latvia in order to provide complete information about construction process starting from the decision taking, procurement and project development to putting the building into operation, and to issue technical and special construction regulations thus ensuring enforcing of similar requirements and public availability of the necessary information, including in electronic format.

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10. Society and participation

The process of preparing and implementing the Latvian Long-term Strategy for Building Renovation shall be transparent, understandable and comprehensive. Interdisciplinary cooperation including between ministries and State institutions is a must.

When drafting the new Renovation Strategy, also other national strategic documents must be consulted, including the Sustainable Development Strategy of Latvia until 2030, the National Development Plan of Latvia for 2014–2020, the national reform programme for the implementation of “EU 2020” strategy, the Latvian Energy Long-term Strategy 2030—Competitive Energy for the Society, the Regional Policy Guidelines 2013–2019 and other related documents. All of these documents must comply with the targeted and successfully introduced Renovation Strategy so that it would contribute to solving of many problems and to reaching the targets set in other strategies. The entry into force of the new Paris Agreement, Marrakech COP 22 outcomes and the potential of the current building stock for reducing the present amount of greenhouse gas emissions are aspects of special importance and topicality and should not be underestimated.

The initiatives put forward in the Long-term Strategy for Building Renovation should not only reflect the State's participation but also foster active engagement of society in this process to maximise the number of beneficiaries and to facilitate public care about property and individual responsibility for project results.

Safer, healthier, more comfortable, beautiful and valuable buildings with lower energy consumption and thus reduced amount of greenhouse gas emissions are of importance to not only Latvia but the whole Europe. Therefore, it is important to establish national, regional and even EU-wide partnerships.