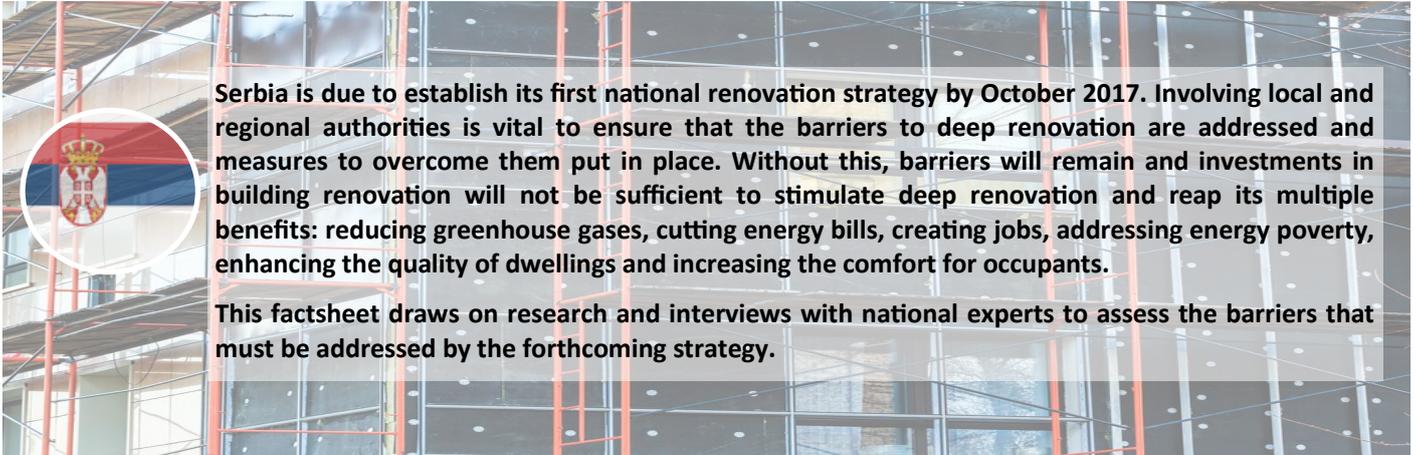


Renovation strategy – addressing the barriers to deep renovation



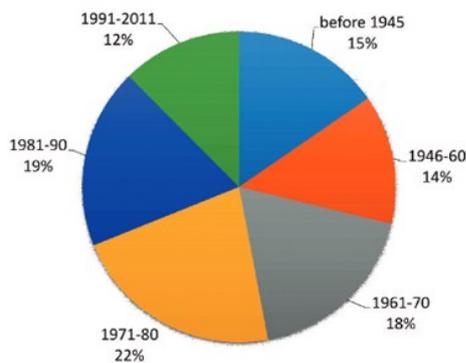
Serbia is due to establish its first national renovation strategy by October 2017. Involving local and regional authorities is vital to ensure that the barriers to deep renovation are addressed and measures to overcome them put in place. Without this, barriers will remain and investments in building renovation will not be sufficient to stimulate deep renovation and reap its multiple benefits: reducing greenhouse gases, cutting energy bills, creating jobs, addressing energy poverty, enhancing the quality of dwellings and increasing the comfort for occupants.

This factsheet draws on research and interviews with national experts to assess the barriers that must be addressed by the forthcoming strategy.

Context

Detailed data on the structure, composition and performance of the building stock does not exist at national level in Serbia. It is estimated that the housing sector accounts for 38% of total energy consumption, and on average 125KWh is consumed for heating per m² – which is comparable with other European countries. The Serbian building stock is very old, with most buildings – 88% - built before 1991.

Figure 1 - Share of residential building by number and construction period [1]



There is currently no renovation strategy available in Serbia. Several action plans with general recommendations have been developed over the past six years, but they do not focus on deep renovation and lack clear implementation plans or links with financing.

[1] Jovanović Popovi M., Ignjatović D., Radivojević A., Rajčić A., Đukanović Lj., Čuković Ignjatović N., Nedić M. (2015) "National Typology of Residential Buildings in Serbia"

Barriers to deep renovation

The most relevant barriers to deep renovation are:

Legislative: The current legislative framework does not recognise the difference between deep energy renovation and non-energy related major renovations. This lack of distinction creates administrative obstacles, unfavourable interpretations of zoning codes and high taxes.

Local funding support and capacity: 11 municipalities have been granted funds for various projects to make energy efficiency improvements, from which hardly 15% is allocated. A lot of project proposals were denied due to incomplete documentation, which indicates lack of project proposal writing capacity at local level.

Communication : Information and communication on the advantages of deep renovation are insufficient. While fairly well informed about some basic energy efficiency issues, local authorities are not familiar with deep renovation. It is still perceived as unaffordable, and thus inappropriate in the current market.

Skills in the supply chain: Builders, constructors and craftsmen are not only unfamiliar with deep renovation, but they are often reluctant to carry out basic energy efficiency measures.

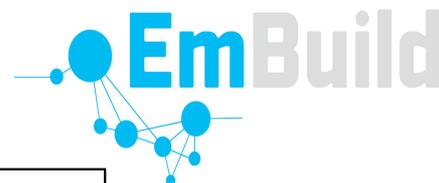


National contact

UoB
University of Belgrade
<http://www.bg.ac.rs>



Breakdown of barriers and potential measures to overcome specific barriers



Type of barrier	Importance
Access to finance	
Payback expectation	
Information	
Institutional and legal framework	
Split incentives	
Complexity and hassle	
Price signals	
Skills in the supply chain	
High transaction cost	

Ranking of barriers by importance, based on EmBuild questionnaire findings

	BARRIERS	Potential MEASURES
COMMUNICATION 	<p>Lack of qualitative data: to assess and measure energy savings.</p> <p>Lack of awareness: among customers/ investors of the wide range of benefits deep renovation entails.</p> <p>No pilot sites: There are no visible examples of proven deep energy renovation projects.</p>	<p>Communication campaign: to shed light on the benefits of deep renovation.</p> <p>One-stop-shops: for advice on renovating buildings.</p> <p>Capacity building campaign and training: at a local level for administrators, energy auditors, certifiers, designers and construction companies.</p> <p>Promote demonstration projects at the local level: to exemplify the benefits and viability of deep renovation.</p>
QUALITY 	<p>Lack of skills: in the supply chain.</p> <p>Insufficient capacity: in municipalities to develop projects.</p> <p>No training or capacity building: on deep renovation.</p> <p>Public procurement: process centred based on lowest price.</p>	<p>Provide tailored advice to building owners and investors: on deep renovation (for example, building passports).</p> <p>Practical training campaigns: for builders, constructors and craftsmen at local level for highlighting issues in the construction and planning process that are crucial for energy savings.</p>
LEGISLATIVE/REGULATORY 	<p>Insufficient building performance requirements: and inadequate enforcement of existing requirements.</p> <p>Ownership structures: in multi-family buildings mean all occupants must agree to proceed with works.</p> <p>Deep renovation measures not properly recognised: in legislation, creating administrative obstacles, unfavourable interpretations of zoning codes and high taxes.</p>	<p>Introduce high energy performance requirements: for the renovation of public buildings.</p> <p>Redefinition of energy requirements: for minimum energy performance in all renovated buildings, introducing deep renovation targets.</p> <p>Phase-out: the worst performing buildings.</p> <p>Prioritise subsidies: and support for deep renovation of low-income households to tackle energy poverty and improve health conditions.</p> <p>Better compliance: of energy performance requirements.</p> <p>Ensure a transparent renovation process: with guarantees for the tenants.</p> <p>Revise the legislation: saying that all tenants must agree on renovation measures.</p>
FINANCIAL 	<p>Poor access to financing: in both public and private sector.</p> <p>High levels of energy poverty: making self-financing difficult.</p> <p>Low energy prices: making deep renovation less financially attractive compared to energy prices.</p>	<p>Stimulation of the market for Energy Performance Contracting: and Energy Service Companies.</p> <p>Public procurement processes: that focus on more variables than the lowest price.</p>

EmBuild supports public authorities in Southeast European countries to prepare a long-term strategy for mobilising investment in the energy efficient renovation of the building stock. A more detailed report on the barriers to deep renovation will be published later in 2017 at <http://www.embuild.eu/>