



## Bringing Bulgarian Residential Buildings to Global Sustainability Requirements

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## Summary

The residential building fund of Bulgaria is relatively young. About 30% is under age 30, almost half is under 40, and only 4% of fund is inherited from before 1919.

At present the Global development requires a sustainable growth. In order to respond to the key challenges outlined above, a European strategy has been defined for the next decade - develop or strengthen appropriate programs for repair, maintenance and renovation projects with ambitious sustainability targets.

The paper presents detailed analysis of residential buildings in Bulgaria, their type and structural conditions; principles of sustainable development; the general aspect of National Sustainable Development Strategy (NSDS) of Bulgaria, the National Programme for renovation of the residential buildings in Republic of Bulgaria and different kind of possibilities to bring the existing residential buildings in Bulgaria to the Global /European/ requirements for structural sustainability.

**Keywords:** Building Structures, Assessment, Rehabilitation, Structural Sustainability.

## 1. Introduction

The residential building fund of Bulgaria is relatively young. About 30% is under age 30, almost half is under 40, and only 4% of fund is inherited from before 1919.

Despite the accelerated depreciation of residential buildings due to poor maintenance, most of them still subject to rehabilitation. According to expert estimates, the group homes in three or more storey buildings, needed rehabilitation and strengthening intervention in the next 10-15 years, it contains about 680 000 homes.

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In order to respond to the key challenges outlined above, a European strategy has been defined for the next decade - develop or strengthen appropriate programs for repair, maintenance and renovation projects with ambitious sustainability targets.

That result in the development of a range of services to address issues such as health and safety, energy efficiency, green building, disaster resilience, indoor climate, re-use/recovery/recycling and design to fit. In the area of renovation of existing buildings, more needs to be done to increase the