

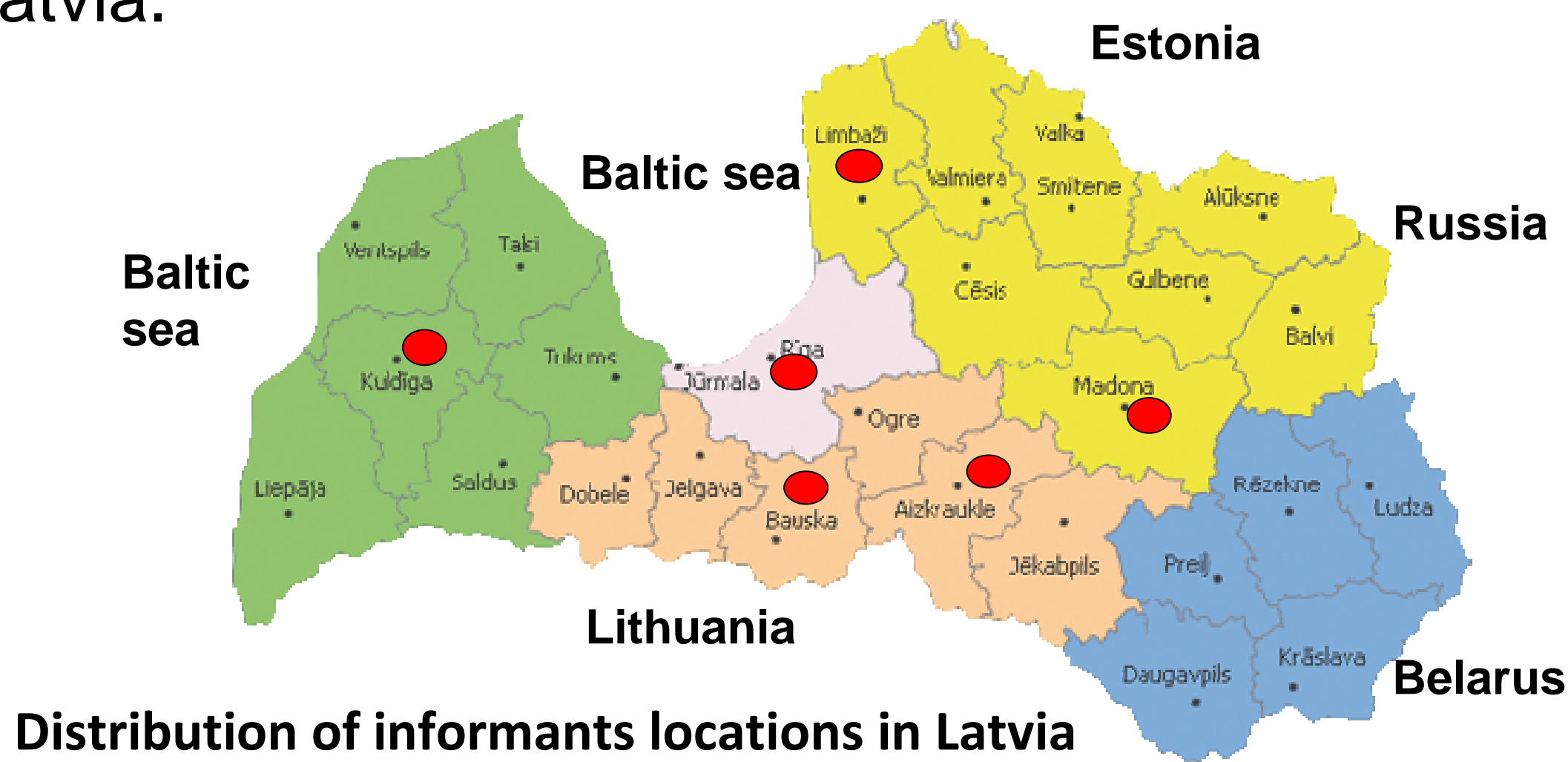
Refurbishing apartments and houses in Latvia and Bulgaria: levers and brakes



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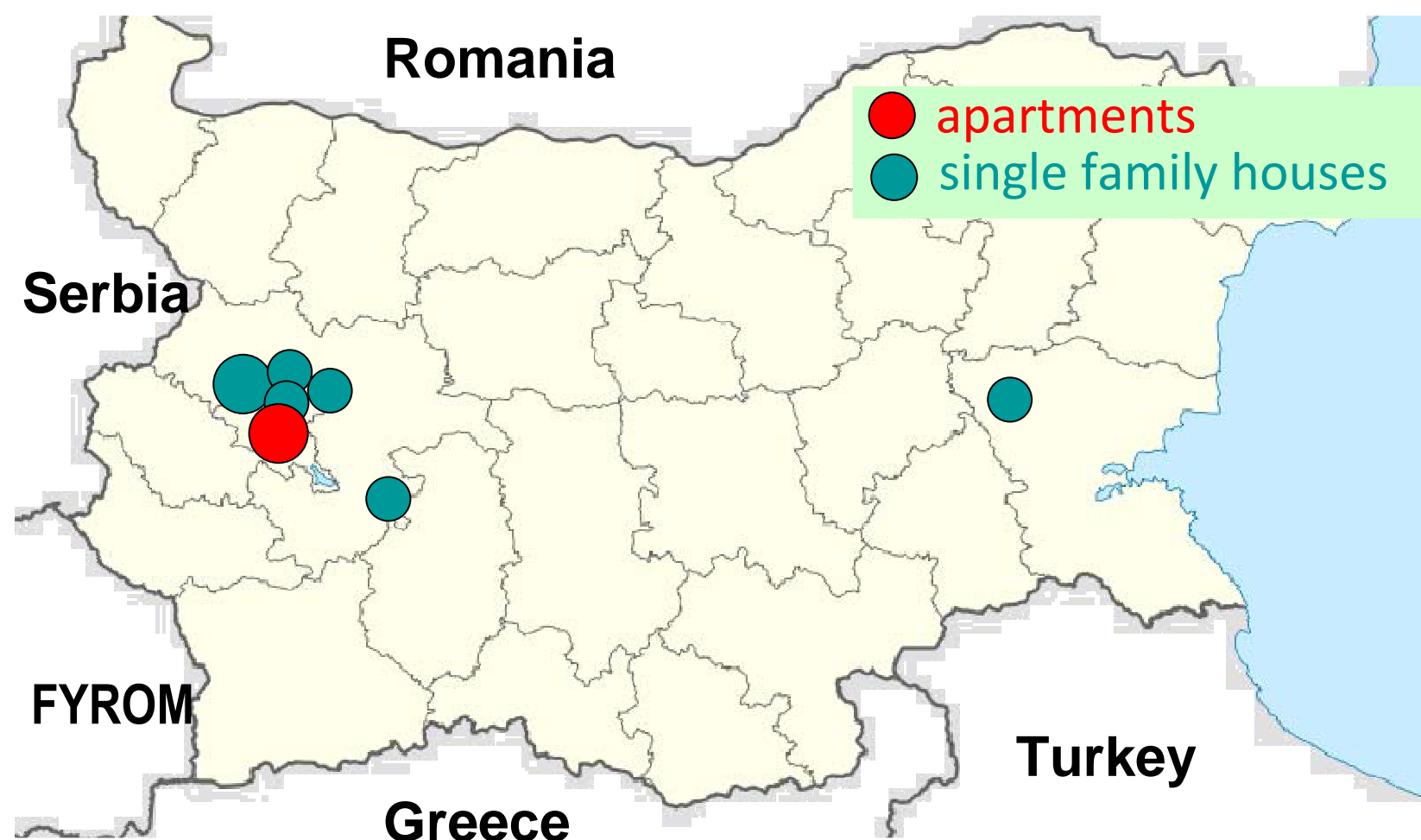
Aim of the research

Most sociological studies on energy efficient refurbishment are recent and have been realised in Western countries. They emphasize the variety of levers and brakes influencing energy efficient refurbishment, moving away from simplistic assumptions. This paper investigate levers and brakes for carrying out energy effective retrofits in existing private dwellings in Bulgaria and Latvia.

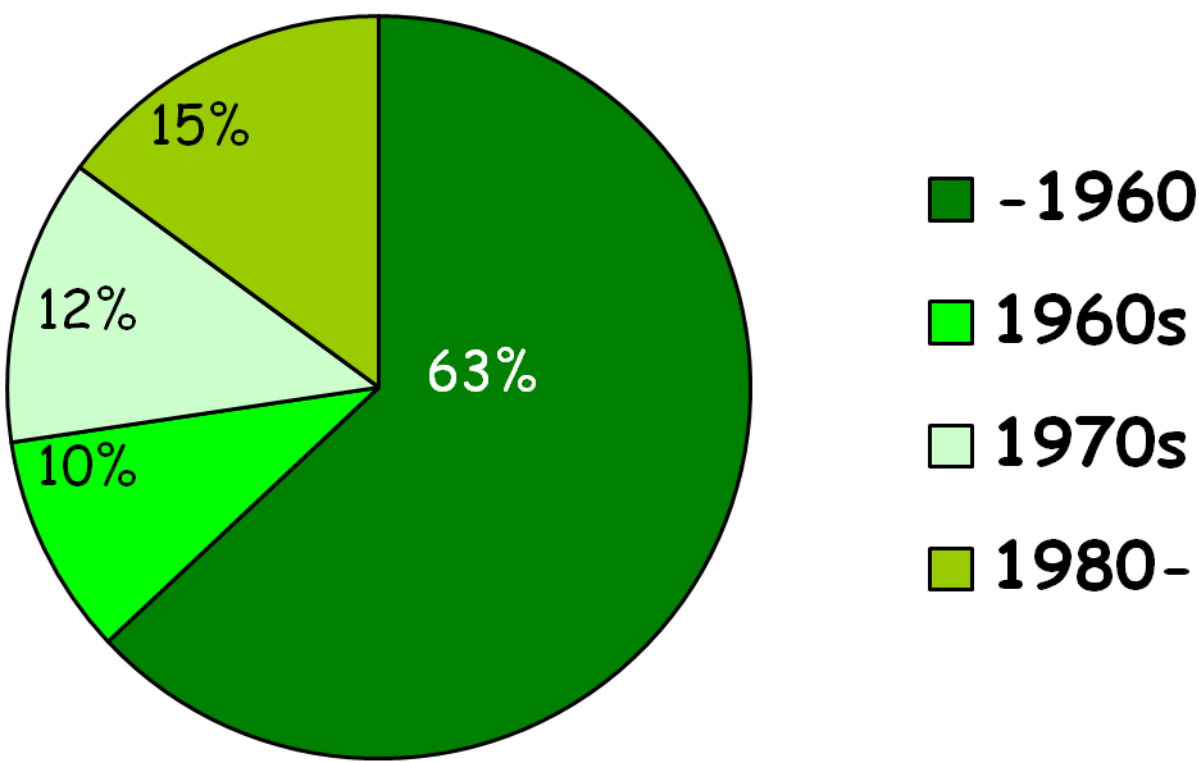


Methods

- 24 dwellings owners in-depth interviews in both countries
- Owners occupying their own apartment or single family house
- About renovations works and their justifications
- Diversified socio-demographic characteristics
- In cities and in the countryside
- Same grid of questions and of analysis

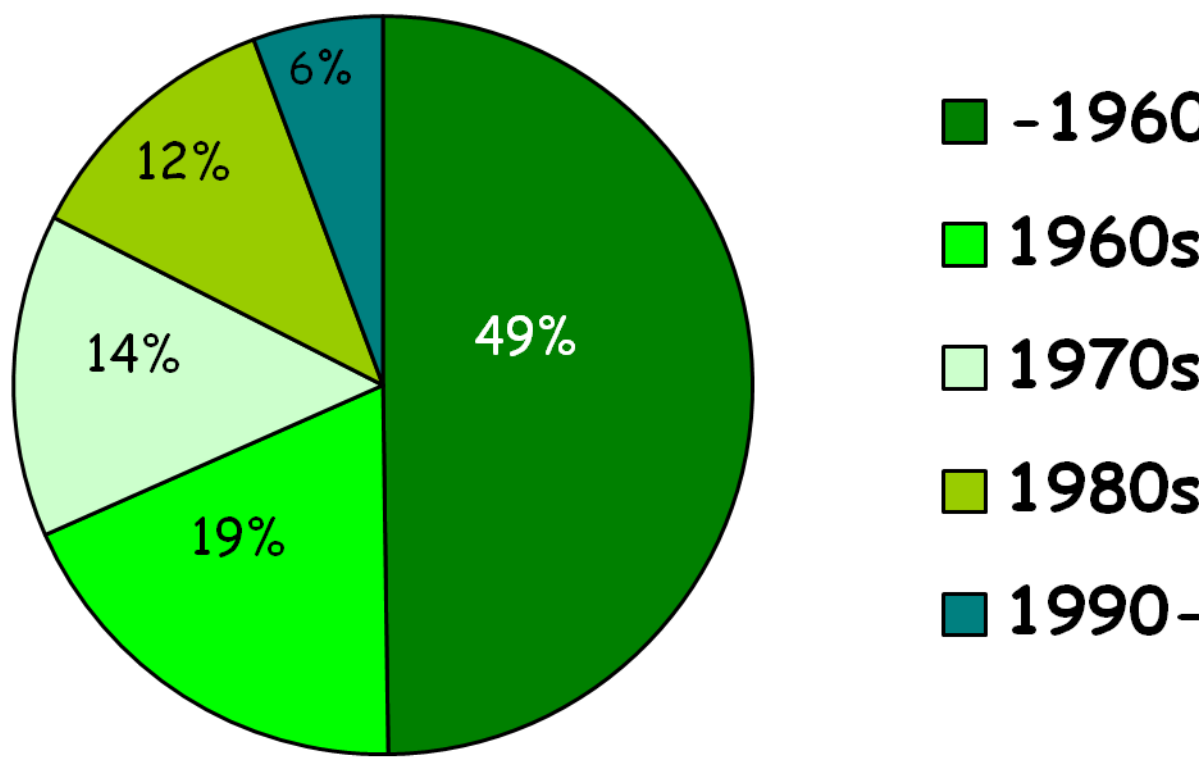


Characteristics of the dwellings and building stocks

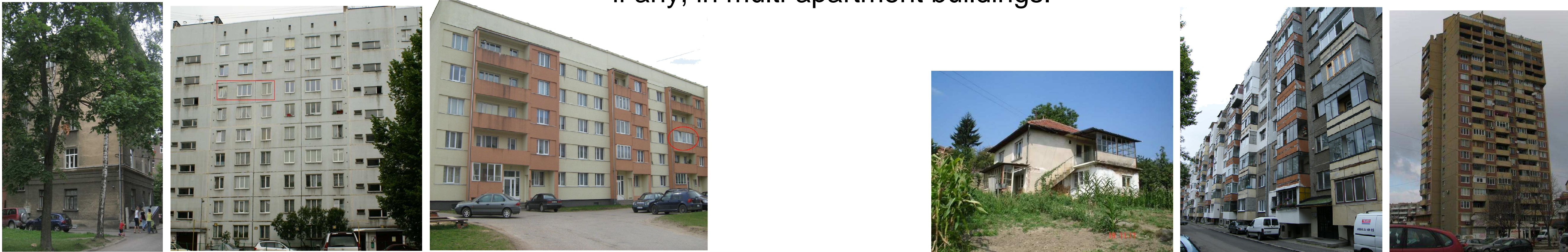


Distribution of the building stock according to building year, in Latvia

- Very old building stocks
- Large proportion of apartments
BUT **Bulgaria**: 46% of apartments
Latvia: 77% of apartments
 - Building stocks mainly located in cities
 - Slow migration rate; mainly owners
 - Third party having control on central heating, if any, in multi-apartment buildings.



Distribution of the building stock according to building year, in Bulgaria



Levers and brakes in both countries

- In both countries:**
- **In apartments,**
 - all renovations are mainly done at once and seen globally
 - Renovation firstly done are about aesthetics
 - Some energy-related works are also often done, if money is available
 - **In houses,**
 - renovations are done step by step
 - Energy-related renovations are always present, and seen as important in allowing a comfortable life without paying too high energy bills.

- Main reasons** for carrying out energy effective retrofits are:
- In **Latvia**, the dwelling's age and bad conditions
 - In **Bulgaria**, reaching comfortable conditions, new living standards

Levers and brakes

The figure below summarises several factors that play a role in homeowners' energy-related renovation practices (even if not sufficient for general conclusions on the relative importance and strength of influence each factor has on the why and how people implement energy efficiency renovations in each country).

Main brake is financial.

Renovations are mainly done with **own money**; discounts and payment by instalments are levers.

Renovations programs can result in full renovation of buildings but imply that people are already well aware of energy-related retrofit for applying.

Specific loans are considered with scepticism.

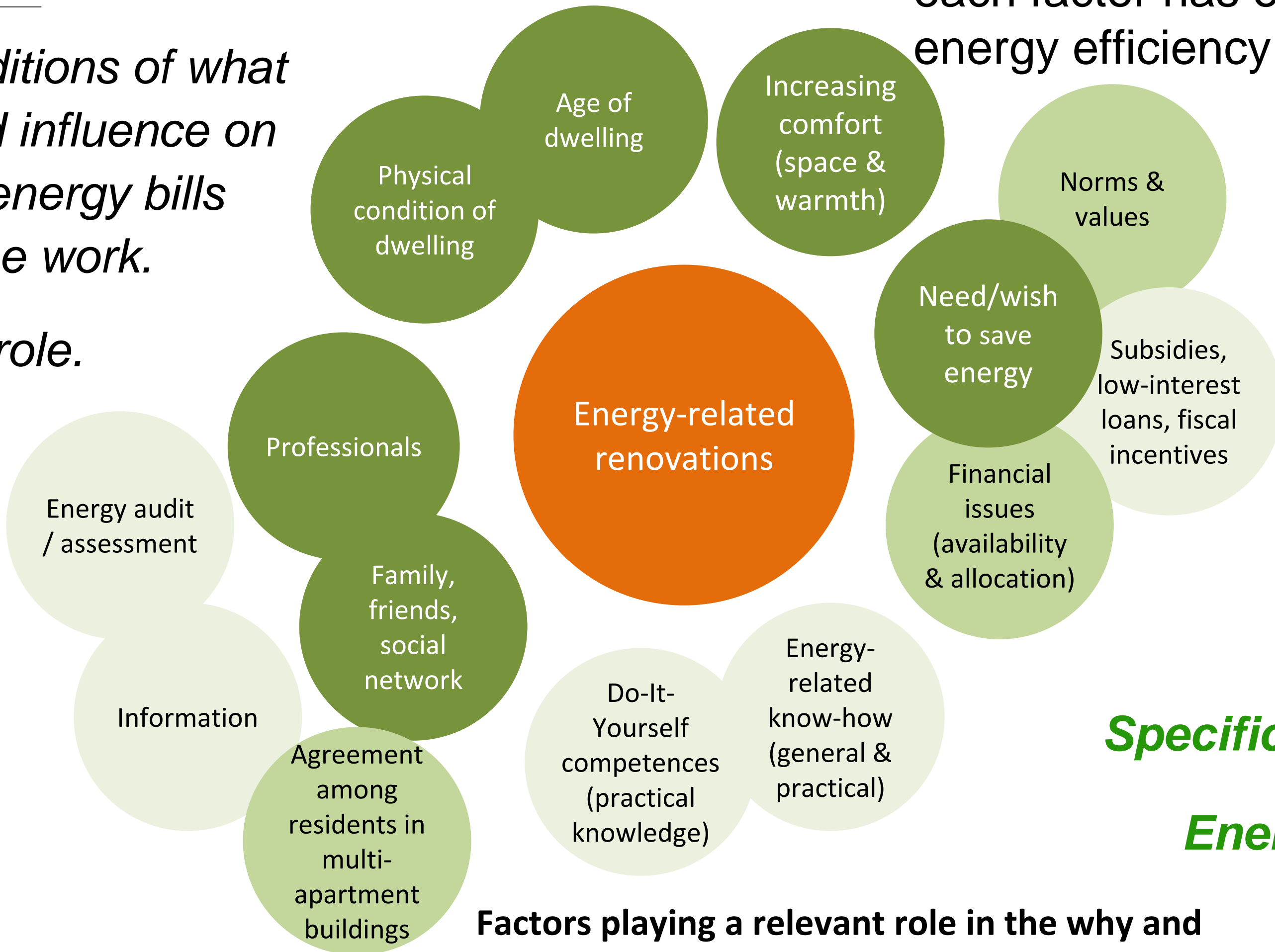
Energy audits and labels, when available, do not seem to play a major role.

Levers: age of dwellings, bad conditions of what has been changed, and anticipated influence on comfort, energy consumption and energy bills are among the main levers to do the work.

Social network play an important role.

Consensus for renovations of whole multi-apartment buildings is hard to obtain.

Professionals are important; in Bulgaria access to professionals seems to be a concern outside the capital area.



Factors playing a relevant role in the why and how of energy-related renovations