Funded by the Horizon 2020 Framework Programme of the European Union

INNOVATE project

WP2 D2.1: Market Gap Analysis

November 2017 - Benoît Priod/Annick Schwaiger

Final Version

Table of contents

Funded by the Horizon 2020 Framework Programme of the European Union

1. INTRODUCTION - THE TOPIC

As exposed in the proposal, the scope of our work within the Innovate project will be condominiums, for whom an integrated energy efficiency service package will be developed, based on the existing services and tools.

partner	Existing Target	Will upgrade / re-organise their existing EE services	New Target	Develop new integrated EE service package
Brussels	Single-family housing	no	condominium	yes

2. THE CURRENT STATE

2.1 Market segmentation – Brussels Capital Region

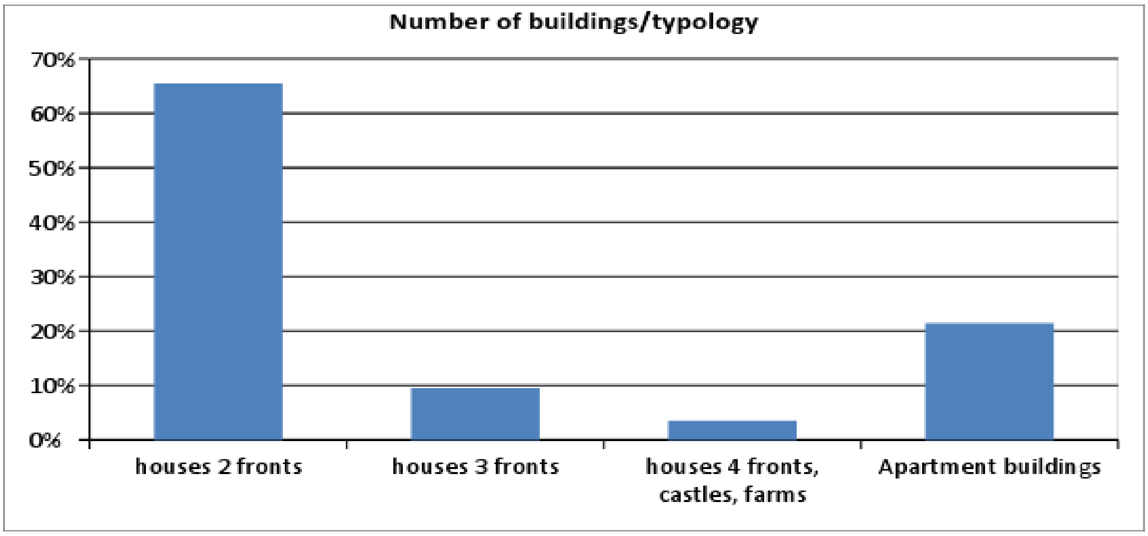
The following is a graphic representation of the most striking facts of the analysis of the current situation in Brussels Capital Region. It is based on several regional and federal sources and studies. Detail and more information can be found in the associated spreadsheet.

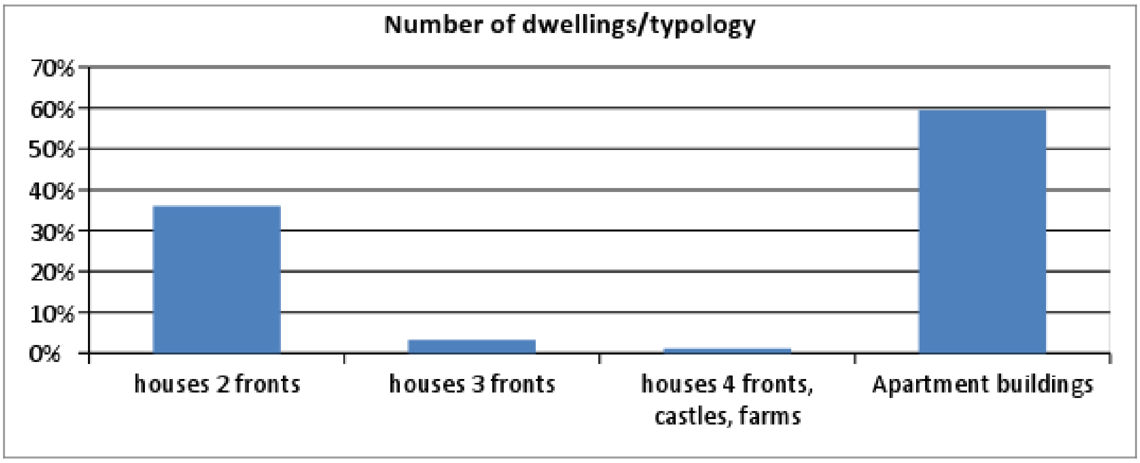
Funded by the Horizon 2020 Framework Programme of the European Union

Graphic representation (see spreadsheet for further detail)

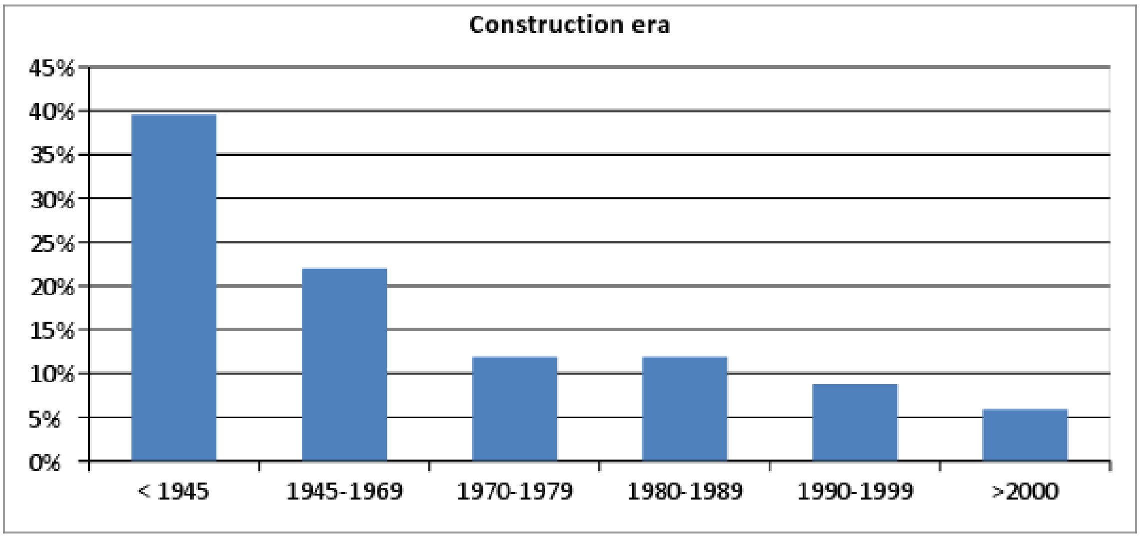
Building stock characteristics

Distribution individual homes and condominiums

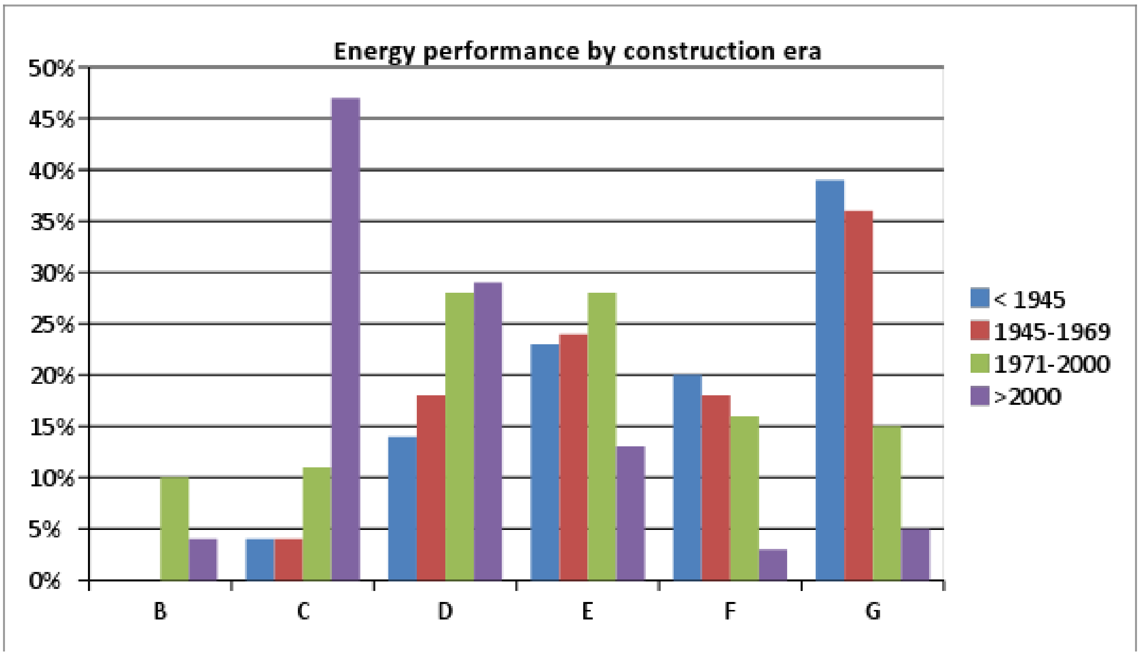




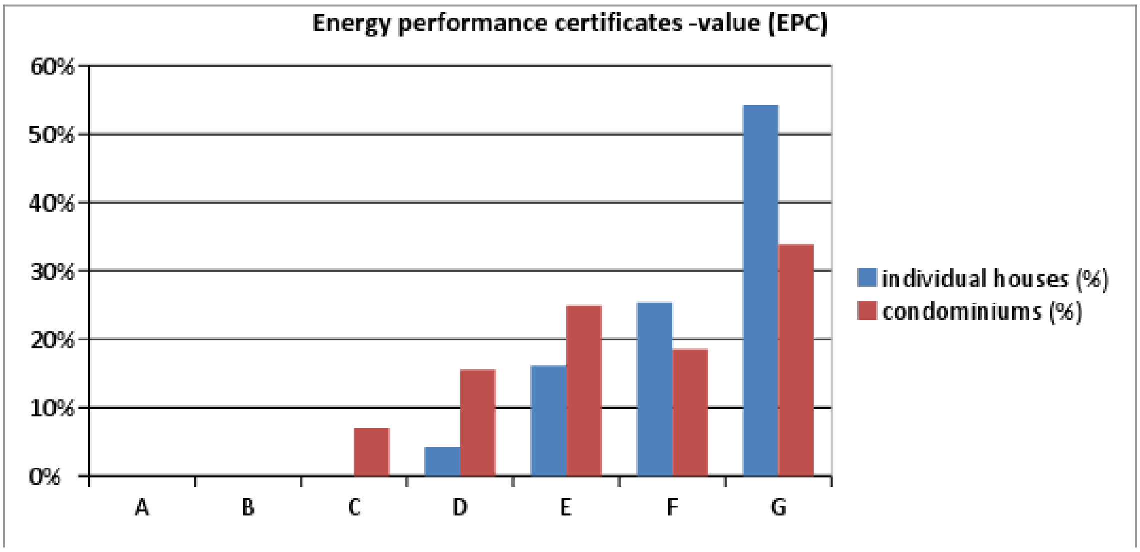
Funded by the Horizon 2020 Framework Programme of the European Union



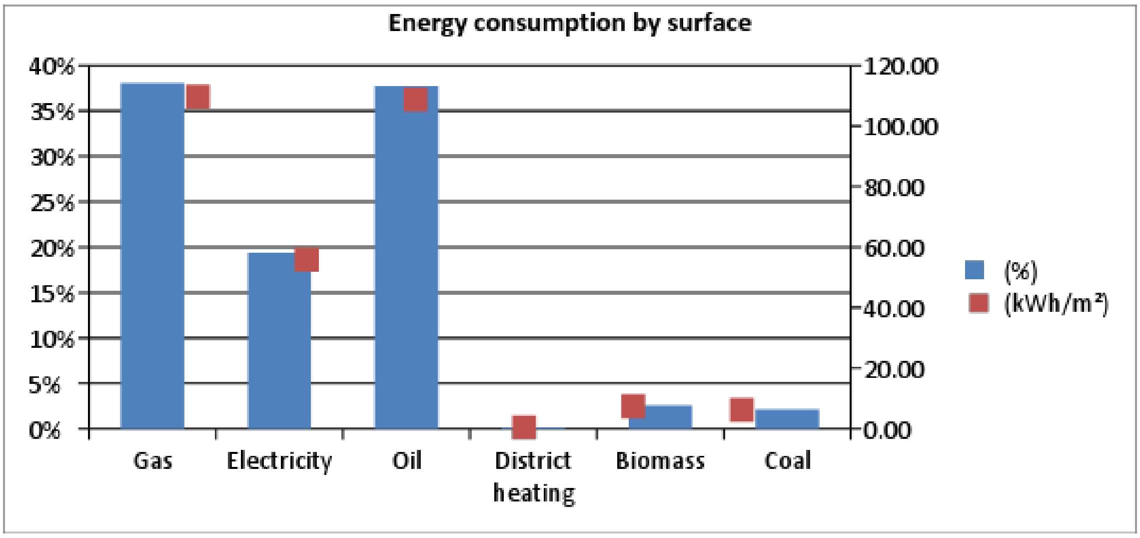
Level of energy performance of the housing building stock



Funded by the Horizon 2020 Framework Programme of the European Union

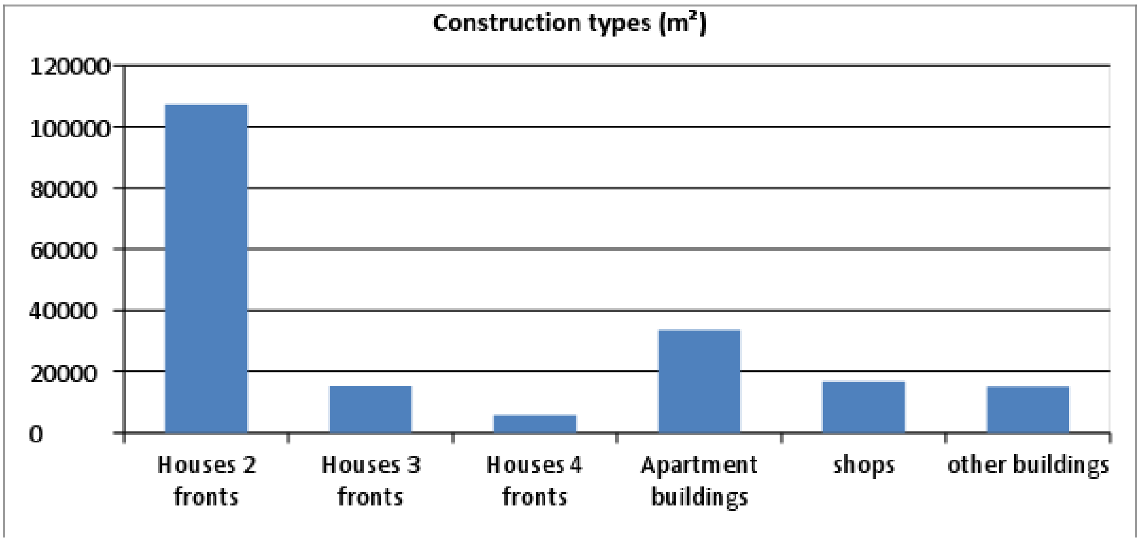


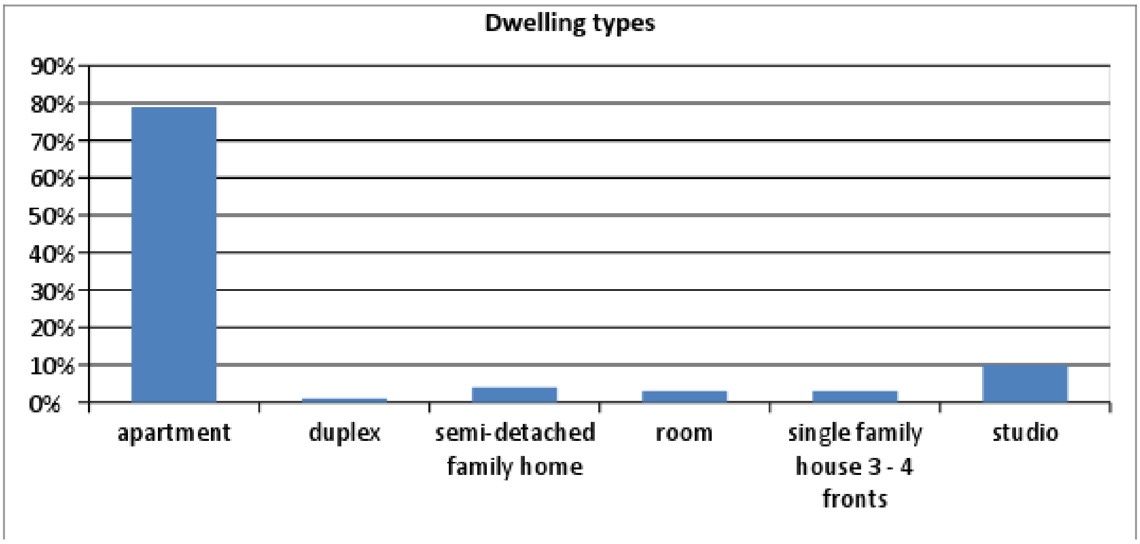
What is the main source of heating energy in Brussels' homes? (electricity, fuel, etc.)



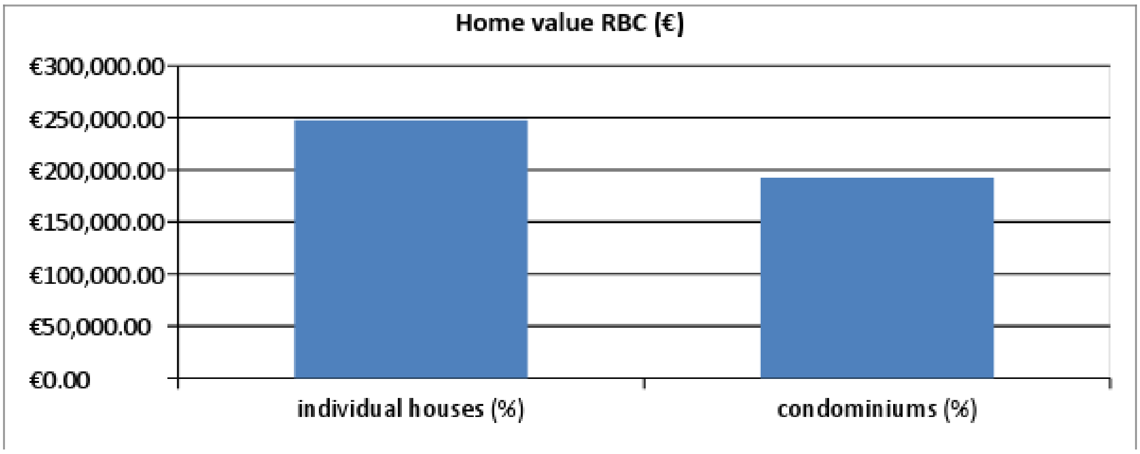
Funded by the Horizon 2020 Framework Programme of the European Union

Construction types



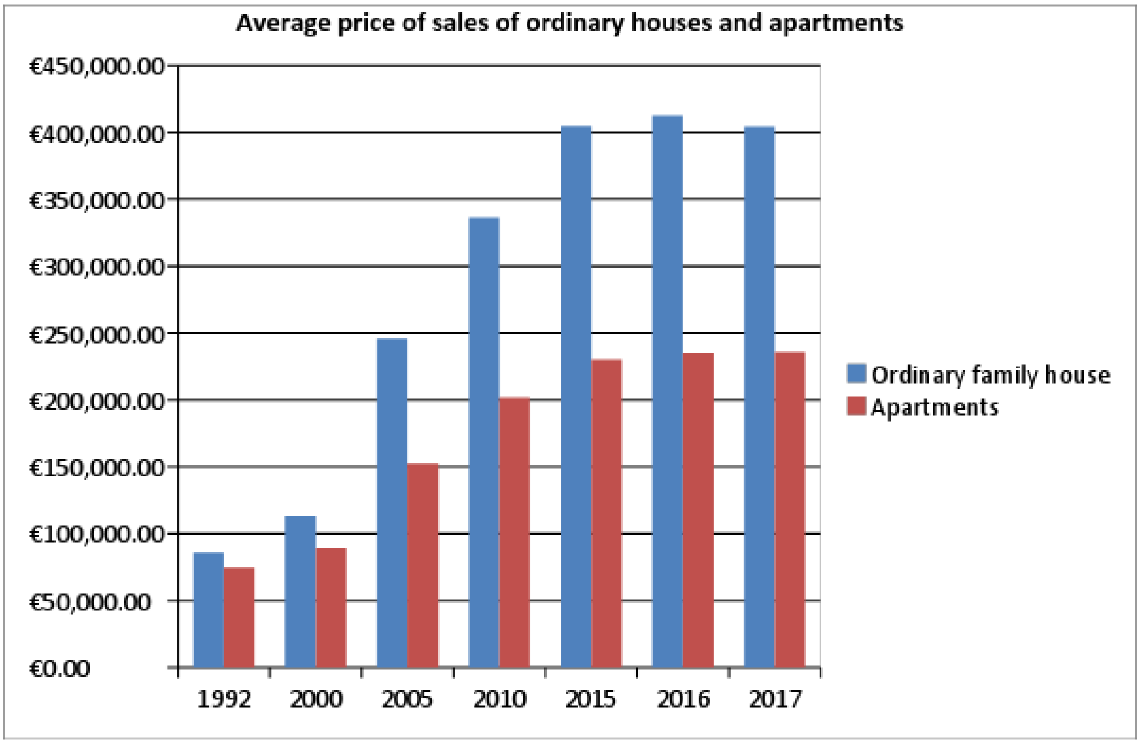


Value of homes in Brussels (/m²)



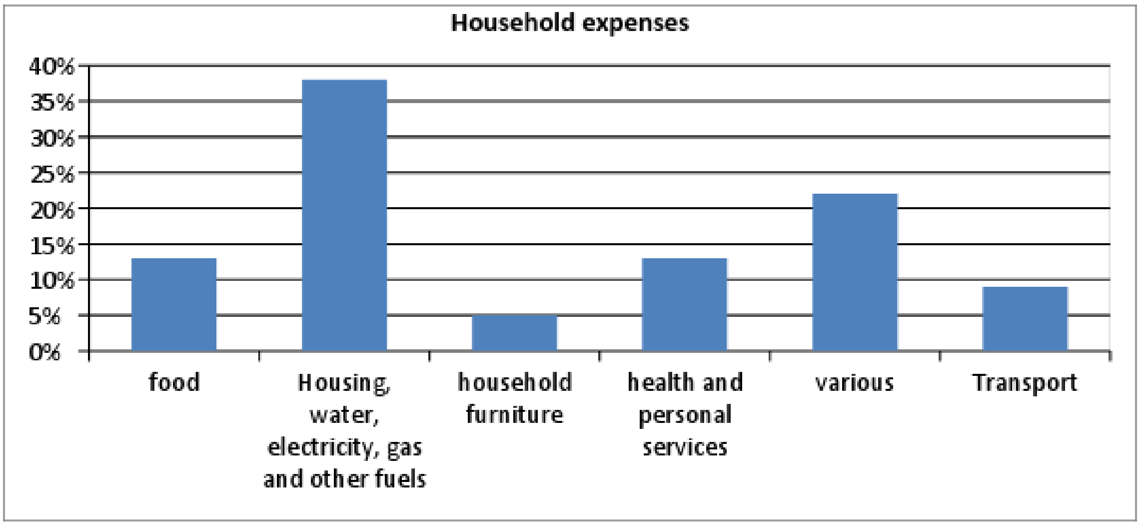
Funded by the Horizon 2020 Framework Programme of the European Union

Average price of sales of ordinary houses, villas, apartments



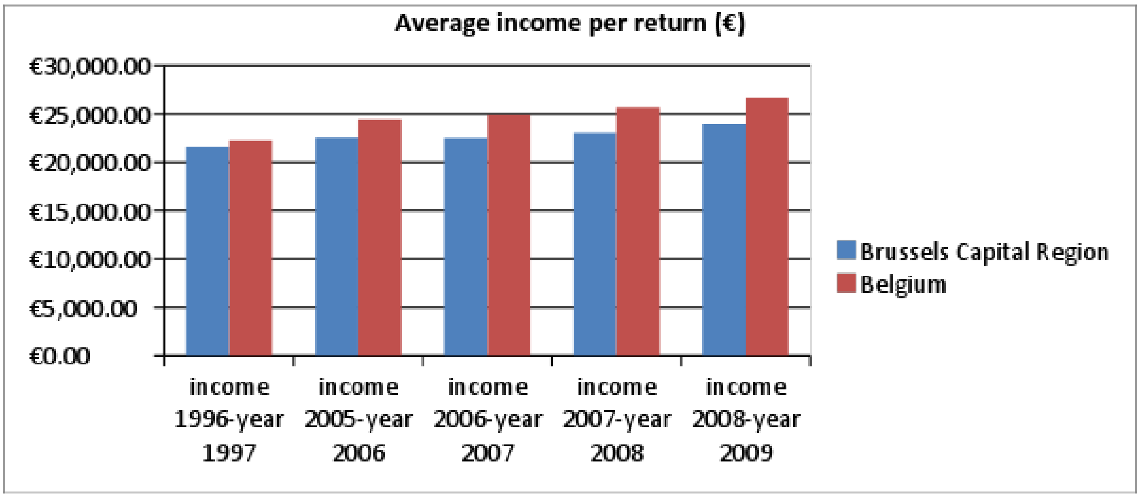
Owner characteristics

What are the household expenses?

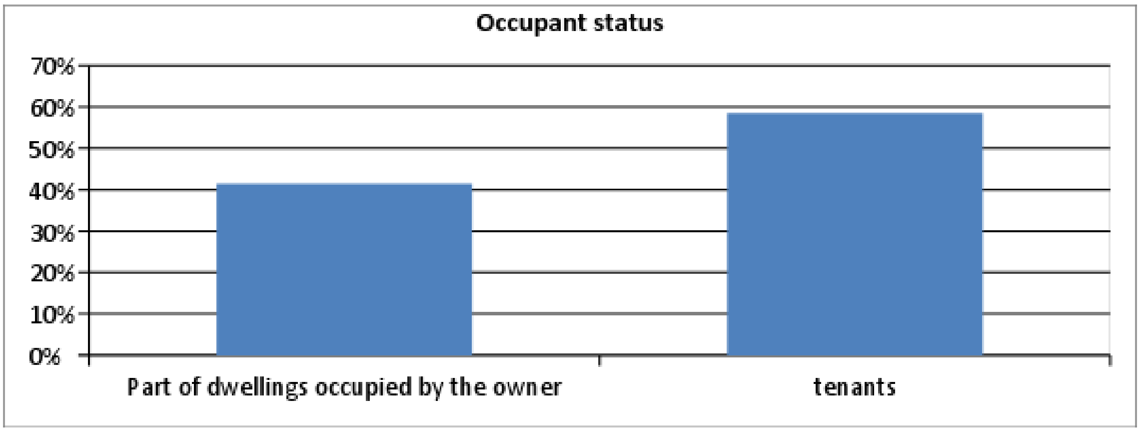


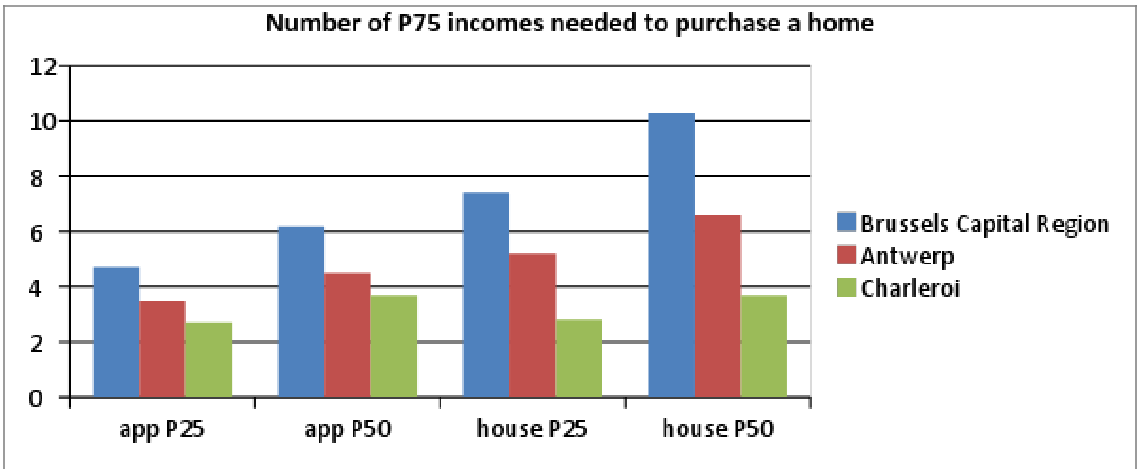
Funded by the Horizon 2020 Framework Programme of the European Union

What is the level of income of occupant households?

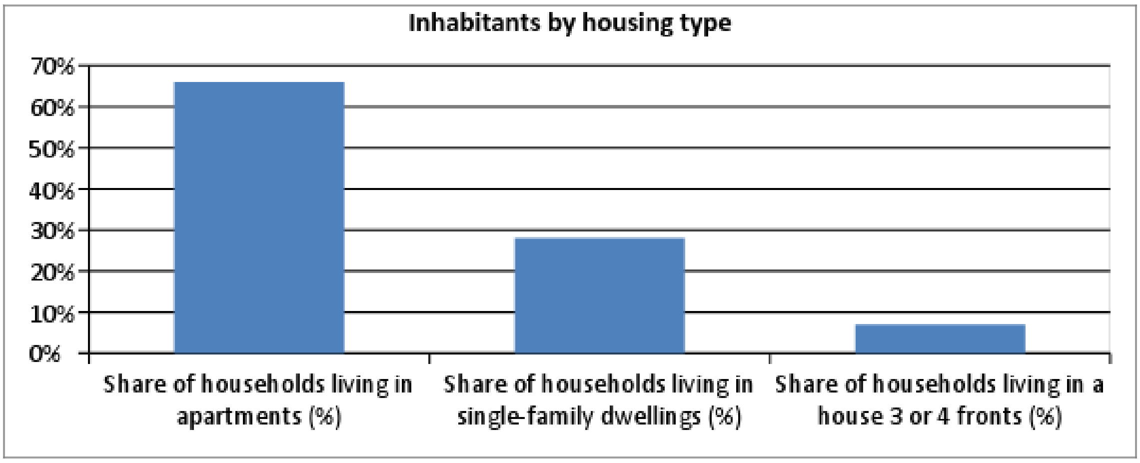


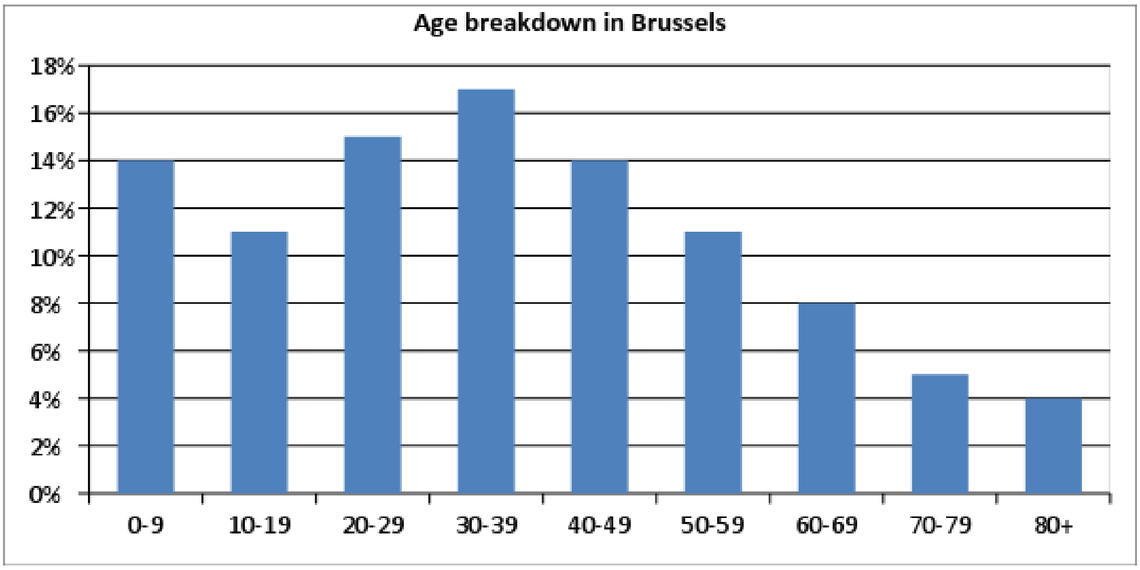
Housing types

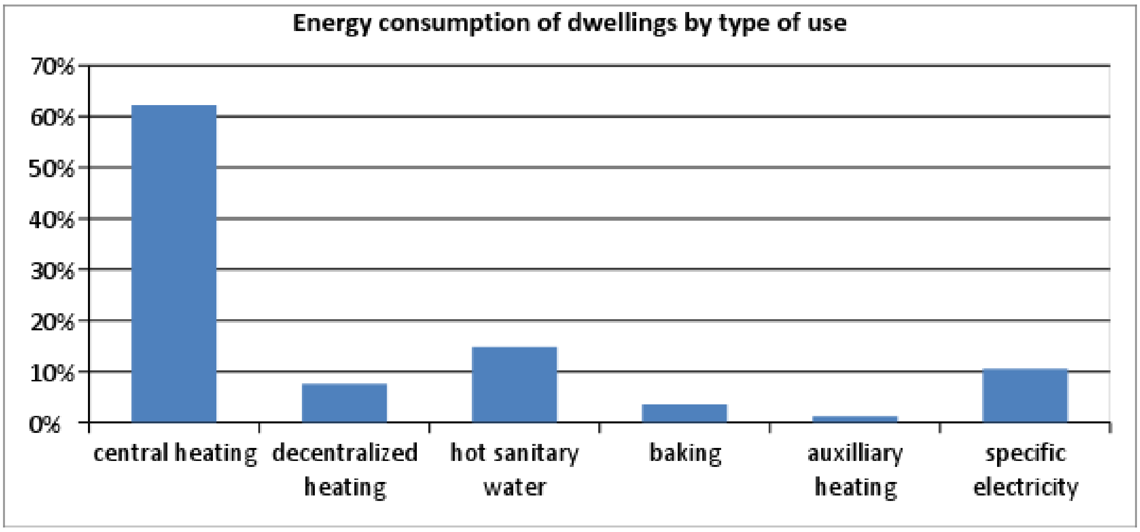




Funded by the Horizon 2020 Framework Programme of the European Union







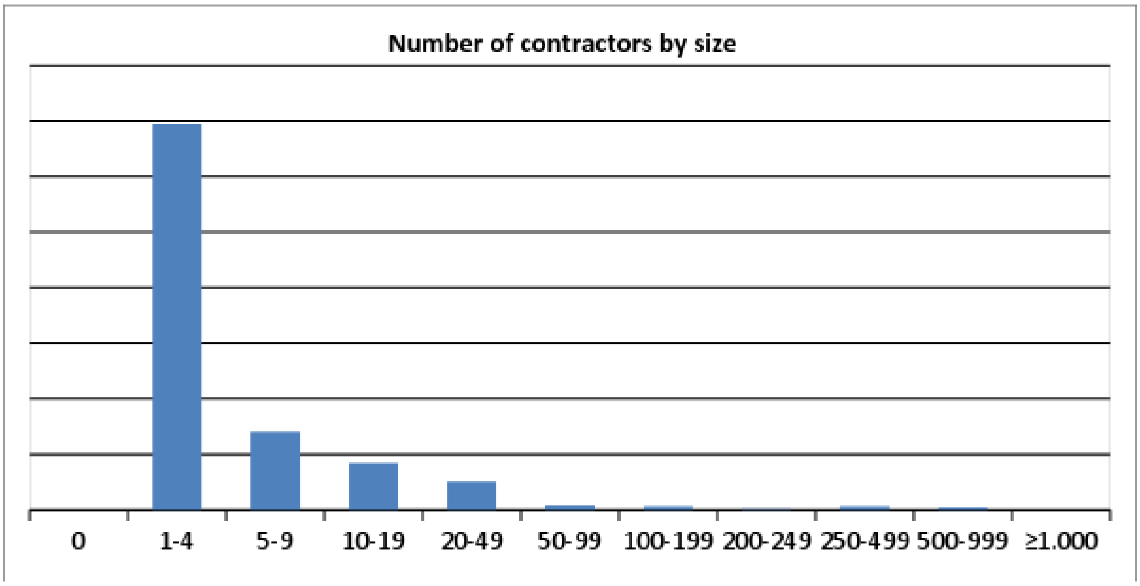
Funded by the Horizon 2020 Framework Programme of the European Union

Professional building supply characteristics

How many building contractors do work on EE refurbishment projects?

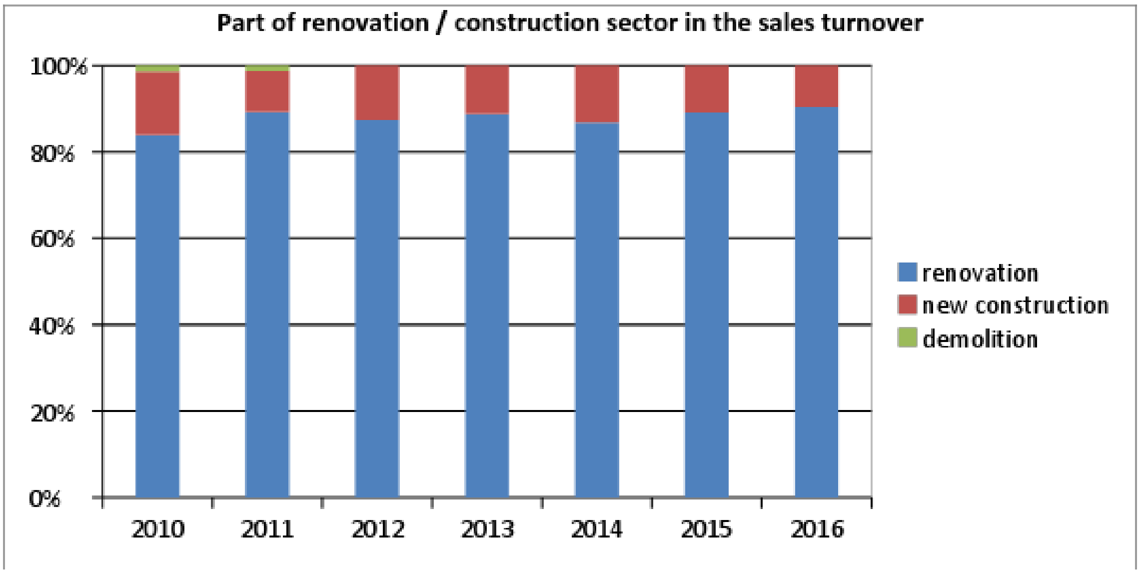
Without distinction: building construction, civil engineering and specialized construction work.

How is this market characterized?



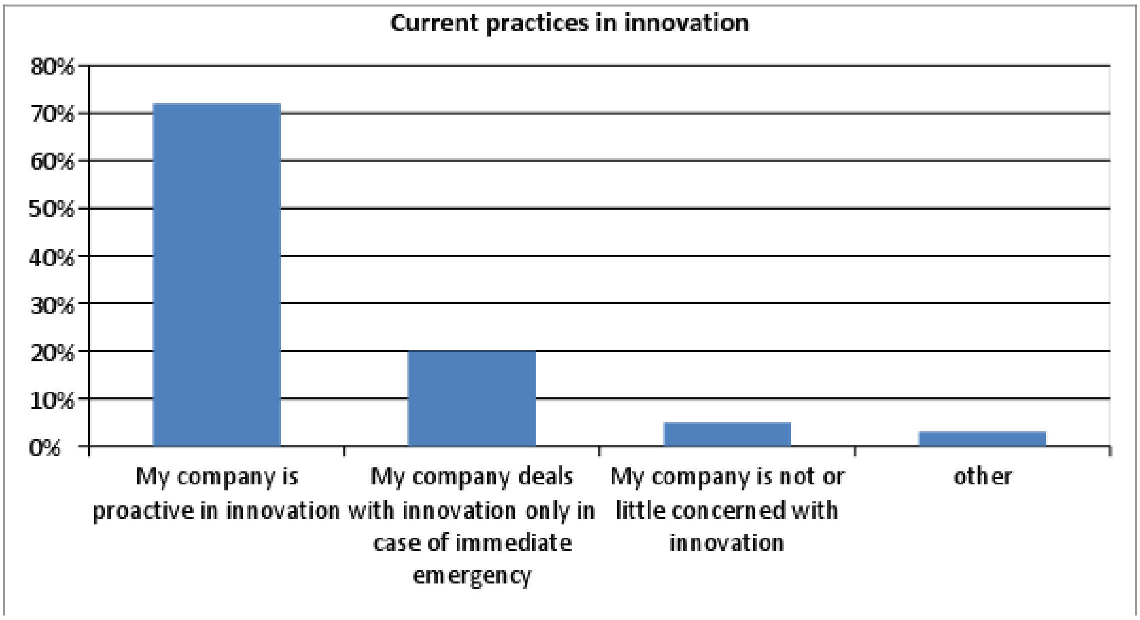
Funded by the Horizon 2020 Framework Programme of the European Union

What is the level of sales turnover in this sector, on this geographic area

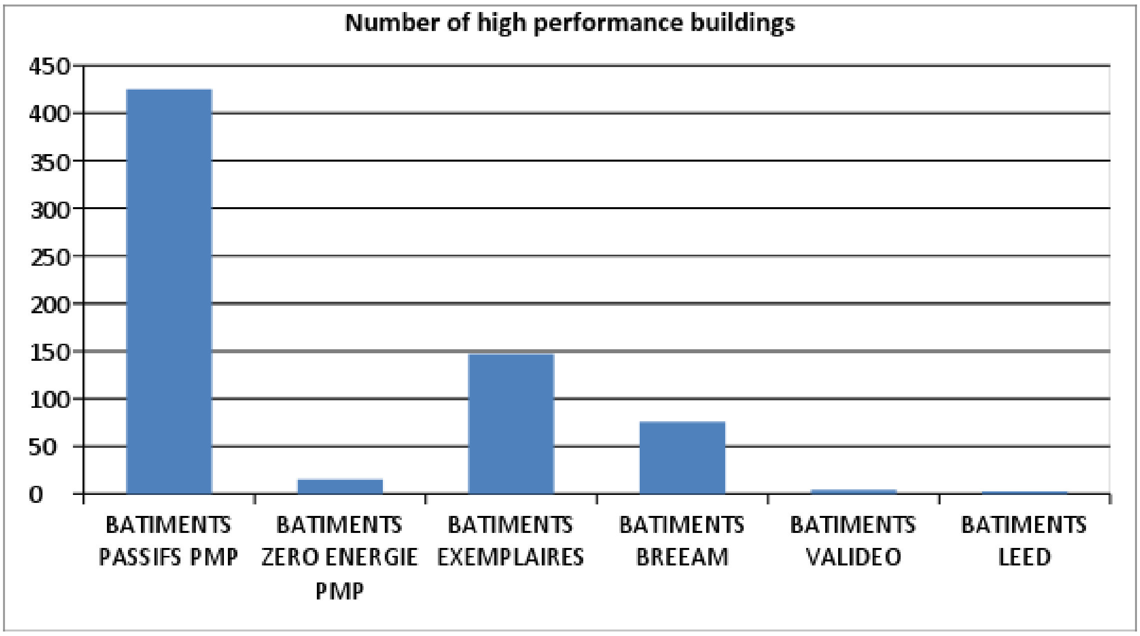


How dynamic is the education and training in the building sector?

Funded by the Horizon 2020 Framework Programme of the European Union



How ambitious are these projects?



Funded by the Horizon 2020 Framework Programme of the European Union

Financing supply characteristics

What is the state of the art of funding offers for EE refurbishment of private residential buildings?					
What are the grants for low-income households?	**types of grants**	Investment grants	Equipment grants	Grants for the realization of works	Call for proposals
	individual houses (%)	yes	yes	yes	yes
	condominiums (%)				
What are the tax incentives?	**types of incentives for energy saving**	Investment-Based Tax Incentives	Capital Recovery-Based Tax Incentives	Special economic zone tax incentives	Investments to save energy
	individual houses (%)	6% VAT for renovations instead of 21%			
	condominiums (%)	6% VAT for renovations instead of 21%			
What are the regional and local incentives?	**local incentives for energy saving**	yes	no		
	individual houses (%)	Yes			
	condominiums (%)	Yes			
Are there specific bank offerings for condominiums?	**condominiums specific offers**	yes	no		
	individual houses (%)	yes			
	condominiums (%)		no		
Are there some special types of loans created by the State ?					
	individual houses (%)	yes			
	condominiums (%)		no		
Are there some financial instruments projects dedicated to EE refurbishment which could be partially or totally financed by the FEDER funds ?	**FEDER funds**	yes	no		
	individual houses (%)		no		
	condominiums (%)		no		
Does the energy efficiency obligations scheme contribute to the financing of EE	**EE obligations help refurishment**	yes	no		

Funded by the Horizon 2020 Framework Programme of the European Union

refurbishment ?		
	individual houses (%)	no
	condominiums (%)	no

2.2 Interpretation of segmentation

The Brussels Capital Region (19 municipalities) is a relatively densely-built territory. The vast majority of the building stock is older than 60 years; many neighborhoods have entirely been built during the 19th century. The scope for retrofitting is therefore large. Many buildings have a historical value, individually or for the perimeter.

Less than 5% of the permit applications in Brussels are related to new construction. This shows that the Brussels market is exclusively oriented towards renovation. This reinforces our approach to the desire to work primarily and mainly on energy retrofit actions and not new construction with high energy performance.

A large variety of players, stakeholders etc. share the market of energy-retrofitting and raise of awareness to it, occupying almost every niche. Many actions, services, tools etc. have already been developed, by public and /or private organizations. The main players regarding the raise of awareness and advice are Brussels Environment, through a Facilitator Service for professionals (since 2007), the Energy Agency Homegrade (since 2012), and an independent network of 10 local non-profit organizations: Réseau Habitat. A will to rationalize can be noticed.

Energy poverty is a growing issue in the Region. Housing and related costs (energy, water etc.) are the most important expense for a Brussels household.

In addition, over the last 20 years, the price of real estate has gone from simple to quadruple for single-family homes and a single to double (sometimes triple) for apartments. The number of revenues required to acquire a property in eastern Brussels is much higher than in the other Belgian cities. This can be explained on the one hand by a significant increase in property prices, but also by the average Brussels income, which is much lower than in the other Belgian cities due to its metropolitan location.

It also appears that financial accessibility in Brussels is under much greater pressure than in other large cities in Belgium. A wide range of mostly small or medium-sized contractors is located or active in the Brussels Region.

Funded by the Horizon 2020 Framework Programme of the European Union

Financial aspects: incentives are available to all home-owners or tenants. Households with low income, but also co-ownerships and other groups have specific conditions. Zero and low interest loans for energy-retrofits are also available to this target group.

The homes in the Brussels Capital Region are mainly single-family houses or apartments in small or medium-sized buildings, very often former single-family homes divided into several units. The second range is taken by large condominium buildings.

Most of the actions, services, tools or financial incentives or products target individual homeowners.

The opportunity for very important energy savings in co-ownerships and condominiums remains mostly untapped.

3. IDENTIFY THE MARKET FAILURE: THE GAP

Barriers and drivers

To get a clearer idea of the barriers and drivers throughout the sector, we have undertaken a survey with building and energy professionals.

Main barrier to engage in a thorough renovation: the costs. The top driver counterpart is the availability of finance or financial products and incentives. The other drivers identified as being decisive are:

- Necessity of renovation
- Existence of a support service or helpdesk, providing help for decision making and adapted information, among other services
- Good return on investment
- High energy bills
- The nature of the co-ownership, well-informed, active, …

Other barriers specific to condominiums and co-ownerships are:

- Complexity of decision-making in co-owned structures
- Low level of information/consciousness regarding energy matters and the benefits a renovation could bring.
- Not knowing where to start
- The urgency of intervention does not allow energy-retrofitting measures

On the driver side, it seems that many of the factors are of similar importance and have thus to interact. The image is more complex than for the barriers.

Funded by the Horizon 2020 Framework Programme of the European Union

Interesting fact: many of the identified key-drivers are located in the social or psychological fields. See survey results for more information (appendix).

4. HOW THE GAP SHOULD BE FILLED

The results of our analysis show the need for the development of 4 actions:

- Raise interest: the main motivations of the target group to start a renovation are better comfort and lower expenses. To trigger these motivations, action must aim the lack of information or interest among some groups. A particular challenge is to involve households that are not part of the share of population that spontaneously reacts to environmental issues. General campaigns for a raise of consciousness should be completed by a proactive, personal and direct approach of the target, for instance through representatives. Existing services or players must be further developed.
- Finance: the main barrier, the cost and availability of financial resources will have to be addressed with the help of financial institutes. This will probably be the most innovative part of the Brussels project, as there is still plenty of room for new products here.
- Specific service for co-ownerships: this service will work on procedures and tools to make decision-making easier, to highlight the benefits of energy-renovations and to facilitate the technicalities and administrative steps. It will be directly available for building managers or co-owners and will be part of a One-Stop-Shop. In order to be efficient, this service should also be multidisciplinary regarding the topics that will be addressed. It will be able to inform and help the applicants / co-owners on technical, legal and financial matters and bring a real added value in terms of relations, communication and exchange of information between the people involved in the renovation project.
- Monitoring: to complete the picture, a service in charge of monitoring the results should be available to those engaged in the retrofitting process, as part of the One-Stop-Shop. In Brussels, depending on the complexity of the renovations, it sometimes takes between 2 and 4 years to decide, implement and finally receive renovation works. It will therefore be necessary that the service that will be set up can ensure a follow-up in the sufficiently long time that to really accompany the co-owners and the indirect player in their project.

- Secondary actions include: a better coordination of building professionals and contractors, a reflection on how to guarantee a return on investment. This task perfectly meets the needs of co-owners who feel helpless in the face of the ever-growing number of people and actors involved in a long-term renovation project.

Funded by the Horizon 2020 Framework Programme of the European Union

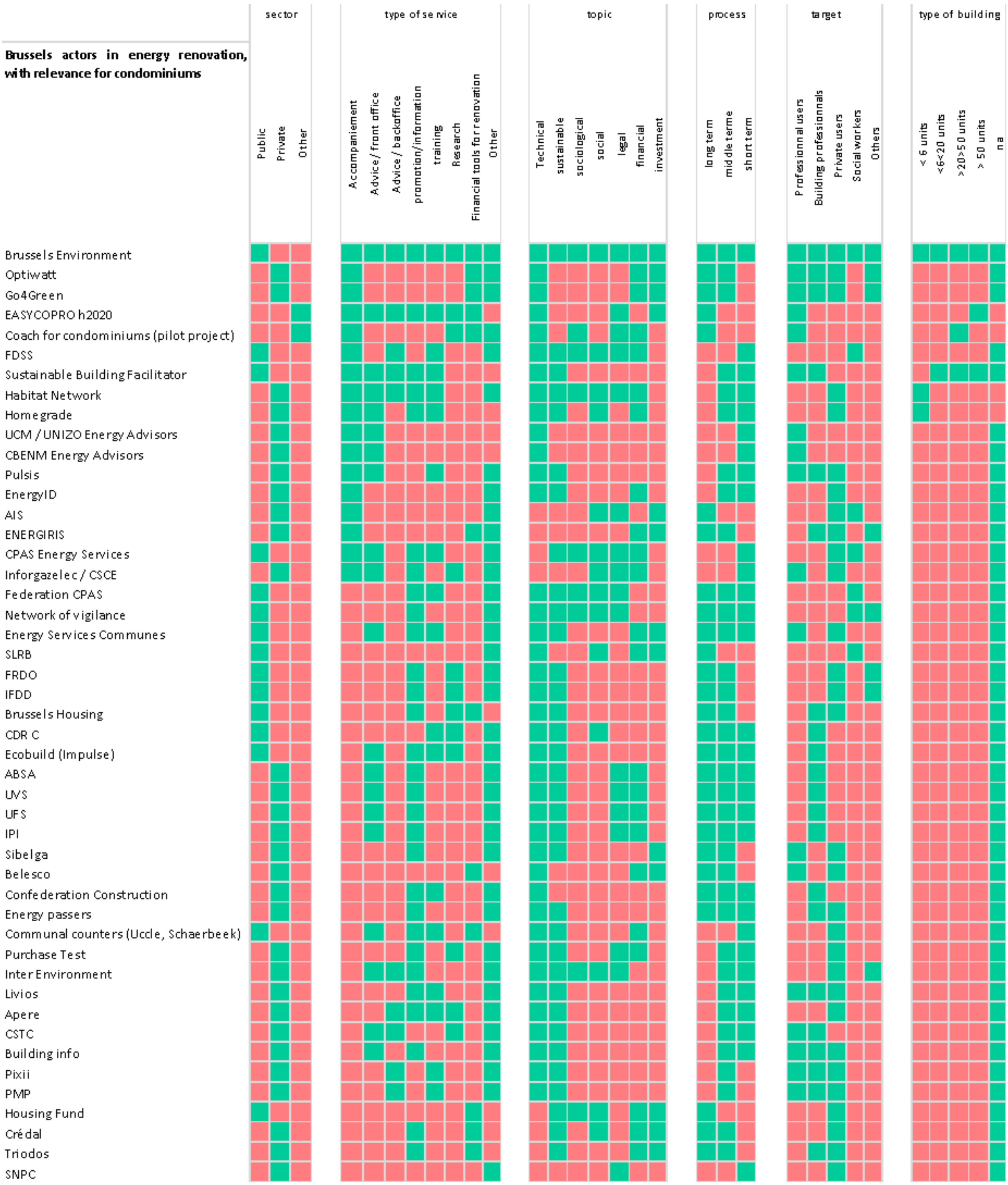
4.1 Actors mapping and interpretation

Brussels Capital Region show a large variety of players and organizations when it comes to energy efficiency.

The institutional players (administrations, mostly regional and local) in Brussels are innovative and forward-thinking and have themselves come up with the larger part of the action taken in the sector. As the regional administration for the environment and energy, Brussels Environment plays a central role in the structuring of the offer, through the development of energy services for individuals, for professionals, financial support for the Habitat network and the launch of low-interest green loans. The public offer is completed by a large number of private organizations, many of whom also receive public money for the development of services or tools, but some of them do so in an independent way. The expertise level in energy issues is very high in Brussels and can be used for new projects. Public private partnerships exist, but could be further developed. In some fields (ESCO, third-party investments, …) there remains a large need for innovation and development.

Based on field feedback, we have mapped out the actors playing direct and indirect roles in condominiums or co-ownerships at different levels and for different audiences related to the condominium sector. In order to have a map as complete as possible, we have taken into consideration other services that can also play a role in providing and relaying information to condominiums. This map is of course not exhaustive, but largely reflects the Brussels' reality.

Funded by the Horizon 2020 Framework Programme of the European Union



Thanks to the PROFILE and BARRIERS & DRIVERs tabs, we are able to clarify what we hope to find as interesting actors in the INNOVATE project. The aim is to develop a support service for energy renovation and energy efficiency.

We can already specify:

- That a support service must be developed combining several themes such as technical, sociological, legal, administrative and legal;

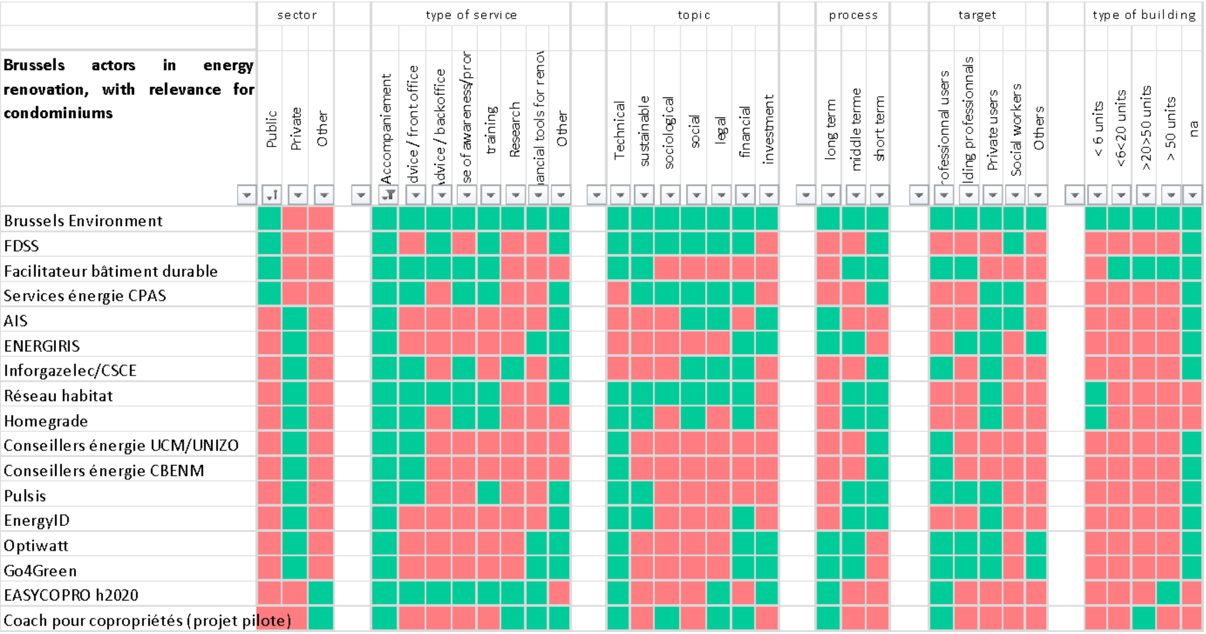
Funded by the Horizon 2020 Framework Programme of the European Union

- That it must target both professional and private consumers' goods;
- We must target buildings of a significant size to have a significant impact.
- That the support process must be medium- and long-term;

With these postulates, we can simplify the map of the actors. Some skills, some services or some audiences do not relate to the current project.

Indeed, the actors who already offer a service of front and back office to the target audience (ie medium and large condominiums) are listed at the top of the ranking in the table below.

We now have a clearer map of the different actors / services likely to develop a specific product for condominiums.

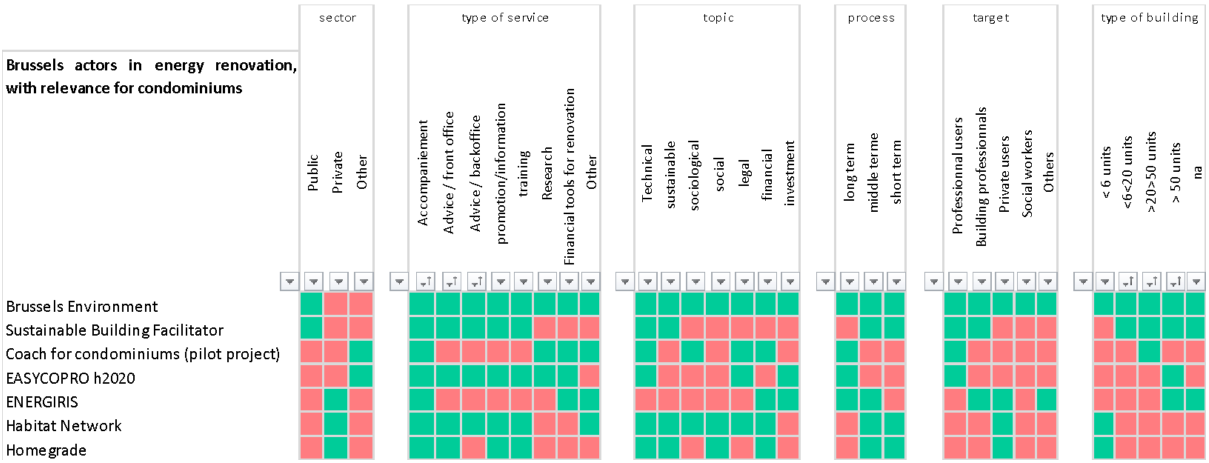


From this list, we can easily remove actors for whom small, medium and large condominiums are not part of the prime target audience, although they can intervene at different levels on particular topics related to condominiums. The FDSS, for example, plays a very specific role in the field of energy for social services in Brussels. Their approach is mainly focused on energy, not renovation.

UCM and UNIZO's energy advisors specifically address energy efficiency issues for their members, small and medium-sized companies. Private companies providing third party investments, council or support are essential to the market equilibrium, but are bound to stay independent.

After skimming, this gives a map of potential actors with whom to develop an energy efficiency service:

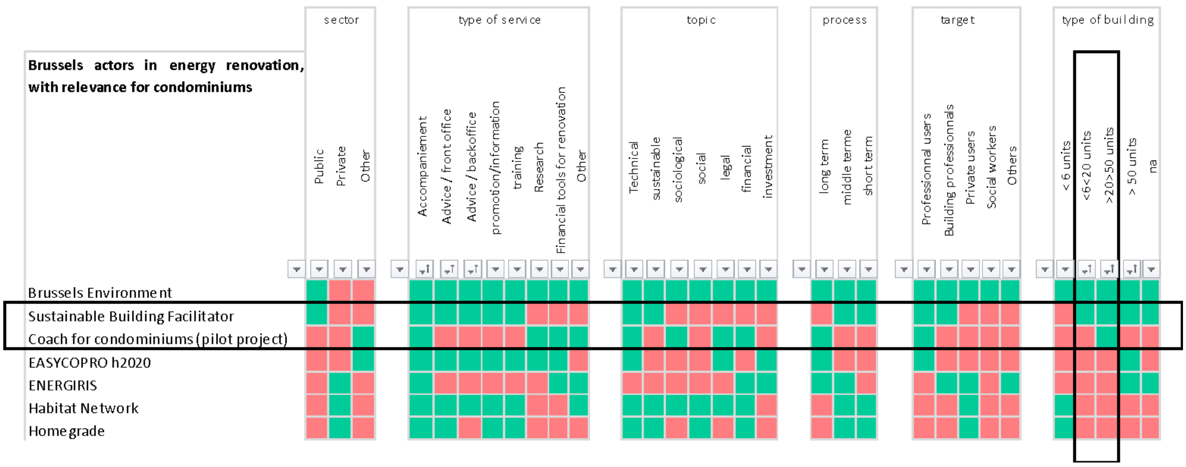
Funded by the Horizon 2020 Framework Programme of the European Union



Given the number of services and existing players, developing new points of contact or actors would only further complicate the offer for professional consumers and citizens. In this context, it seems more appropriate to upgrade existing services.

Given the framework set at the beginning of the project with a focus on medium-sized buildings and in order not to encroach on the private sector, it would be preferable here to focus on medium-sized buildings, between 6 and 50 units.

After these new subtractions, the two entities ideal to endorse the mission appear to be the sustainable building facilitator and the future condominium coach. They are complementary and allow cutting costs and rationalizing the offer.



The collaboration between these two actors would combine skills and expertise from both sides to provide a support service offer as complete as possible, for the purpose of energy renovations of condominiums.

Funded by the Horizon 2020 Framework Programme of the European Union

4.2 Service map

Awareness raising activities are mostly carried out by public players or the local Energy Agency, as they involve major investments.

Many different services – workshops, info-services, … - exist on different levels and are adapted to different target groups. Most of these services depend on public support and are complementary.

The past few years, new services provided by private companies have emerged. They require a financial contribution or are paid for by generated savings.

4.3 Interpretation of the service map

Private companies, cooperatives or non-profit organizations enclose a very important potential for innovation and for filling the existing gaps in the market.

A general reflection on a harmonization of the services would be useful. The present map of actors and services will be the first step in this direction.

Funded by the Horizon 2020 Framework Programme of the European Union

5. GENERAL CONCLUSIONS

Fact 1: there is a huge potential for energy-retrofits in Brussels

Fact 2: co-ownerships and condominiums have not yet been addressed specifically by services or tools or for some services are even excluded by conditions.

Fact 3: the financial, social and psychological barriers and drivers are the most important ones to be addressed.

Many actors and players already offer services or tools. The existing is to be completed with:

- More targeted awareness raising campaigns
- Financial tools available to everyone and in particular condominiums and co-owners
- A support service specific for co-owners, providing adapted tools and approach
- Monitoring of the results and benefits of large-scale energy-retrofits.

6. CHECK YOUR ACTION – SWOT analysis

6.1 Strong points

Brussels Environment is the key player on energy efficiency issues in Brussels and has a long experience in developing innovative services and tools, as well as a strong will to go further than the requirements and outstanding in-house expertise.

The many organizations and stakeholders form a strong and diversified network.

6.2 Weak points

It is particularly difficult to find innovative and proactive ways of mobilizing co-ownerships.

Fragmentation of services and players.

Private services are most of the time financed or co-financed by public funds.

6.3 SWOT conclusions

For the development of products and services aiming at co-ownerships, the reinforcement of partnerships, collaborations and existing services will be more efficient than developing new services. The public-private collaborations are particularly promising.

Funded by the Horizon 2020 Framework Programme of the European Union