MAPPING DEMAND SIDE DRIVERS ACCORDING TO THE SUPPLY SIDE

REFURB DELIVERABLE REPORT 3.1

Overview and
one-stop shop solutions
for private homeowners

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Deliverable D3.1 Mapping demand side drivers according to supply side

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Summary

Renovation by the private sector towards increased energy efficiency is seriously lagging behind. As more than sufficient technological solutions are available, focus must be on removing non-technological barriers. The main barriers in the residential sector relate to fragmentation of the renovation offer, resulting in inefficient or only partial solutions. In addition to financial restrictions and unclear benefits, homeowners do not have a structured way to obtain all the necessary information. One way to solve this is the use of a '1-stop-shop concept'. Many have been put in practice. Some were successful, others not. They often lack an understanding of the concerns and demands of homeowners.

The REFURB project focuses on the complex interplay of barriers through coordinated process organization, innovation and optimization. This way the REFURB project will bridge the gap between supply and demand sides. Therefore, WP2 and WP3 are dedicated to analyze demand and supply-side drivers.

This report is part of WP3 ('supply side mapping') that focuses on the supply side. The supply side involves suppliers of technologies or technological solutions such as insulation and renewable energy solutions, like contractors, architects and other advisors which target the demand side. In WP 3 the view of the supply side on the demand side and the already known solutions will be mapped. These objectives will be realized in three different deliverables. This report D3.1 is about understanding how the supply side perceives the demand drivers and to define the problem of mutual understanding.

The REFURB project focuses on renovation of dwellings to Nearly Zero Energy Buildings (NZEB) through (staged) deep renovations. The homeowners can be either living in their own dwelling (owner-occupant) or let their dwelling to a tenant. The final research question of the REFURB project is: How to stimulate private homeowners (and co-decision makers, like tenants) to renovate their dwelling to NZEB?

To resolve this question, this report identifies **what is driving homeowners to renovate their dwelling(s) to NZEB in in the eyes of the supply side?**

Actually, both **drivers** and **barriers** have to be researched. As drivers are positive arguments for homeowners to renovate to NZEB, barriers are negative arguments for homeowners to renovate to NZEB. These barriers can be important obstacles to overcome before one can start using drivers to stimulate homeowners to renovate to NZEB. Nevertheless, a driver can also become a barrier in certain circumstances.

REFURB partners of all countries involved gathered existing studies, advertisements (internet, catalogues, information from technical fairs…) of the supply side to the demand side and eventually made new surveys to determine the demand-side drivers according to the supply side in their country.

Out of these results the **general categories** for the demand-side drivers according to the supply side were determined. Seven general categories of demand-side drivers according to the supply side are determined out of the input of all partners:

- Comfort in living
- Comfort in process
- Technologies
- Guarantee for supply side

- Trust in supply side
- Communication
- Benefits

The complete list of categories and subcategories of demand-side drivers is represented schematically in Figure 1.

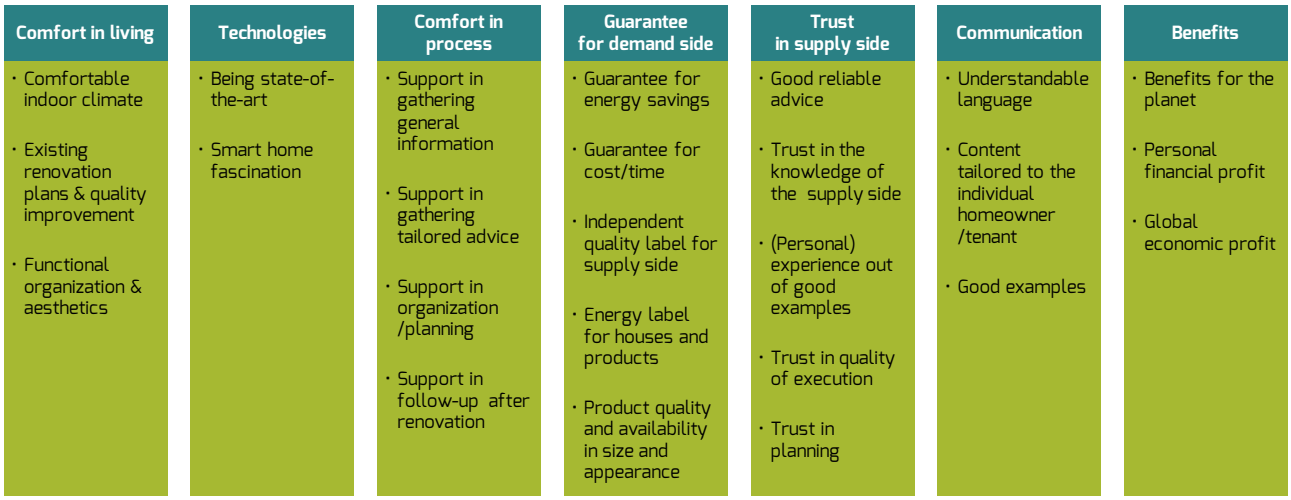

Figure 1: demand drivers according to supply

In a final document for each country the list of drivers mentioned were arranged according to the established general categories.

In report D2.1 of WP2 ("demand side mapping") of the REFURB project, a segmentation of the demand side was established. A segment is a group in the market with similar characteristics. The segmentation is relevant for NZEB-renovation and demand aggregation schemes. These segments are linked with drivers and barriers homeowners face when deciding on NZEB-renovation. Based on this segmentation, drivers and barriers (financial, social, psychological…) are linked with different segments in report D2.2. When comparing the demand-side drivers according to report D2.2 with the demand-side drivers according to the supply side, mentioned in this report, some trends can be distinguished.

The main observation is the **good match** between both perspectives. There is a large overlap between the identified barriers from the demand side and the supply side. This indicates that overall the supply side has a pretty good insight in the motives why homeowners renovate or don't, and how they can be stimulated to renovate, based on the information available.

However, the **mismatches** are also significant. The mismatches appear in 3 dimensions: different clustering, different drivers and barriers, different estimation of the importance of drivers and barriers.

Different drivers will be more or less important for different target groups or segments.

Communication of the supply side is either targeted towards a broad audience, or focused on a specific (market) segment. Further research in the REFURB project has to reveal whether this focus on specific

target groups could be part of a more effective future solution to encourage people to renovate to NZEB. The segmentation established in report D2.1 can be used to define those focus groups and connect the most important drivers with these groups. These will be important to develop the 'most compelling offer' in WP4.

The supply sides' perception of the drivers of the demand side is thus very approximate to the real drivers of the demand side. Only the accents are different. The demand-side drivers and barriers missing in the perception of the supply side, could be seen as ways to organise the demand side or solutions for the supply side that are covered in the following tasks of WP2 (demand side) and WP3 (supply side).

As the problem of mutual understanding between demand side and supply side does not seem a huge problem, it is probably rather the way the supply side appeals on these drivers that needs some adjustment. The REFURB project supposes there are still lots of improvements possible in the organisation, training and communication of the supply side to better target the demand side. This will be investigated in the next reports for WP3.

However, this report is the result of a small research in the EU countries concerned. This study does not take into account all players in the market. It is a possible approach, but some more and deeper studies are necessary to take really grounded overall conclusions.

This report has several links with other REFURB deliverables, as input or output (Figure 2).

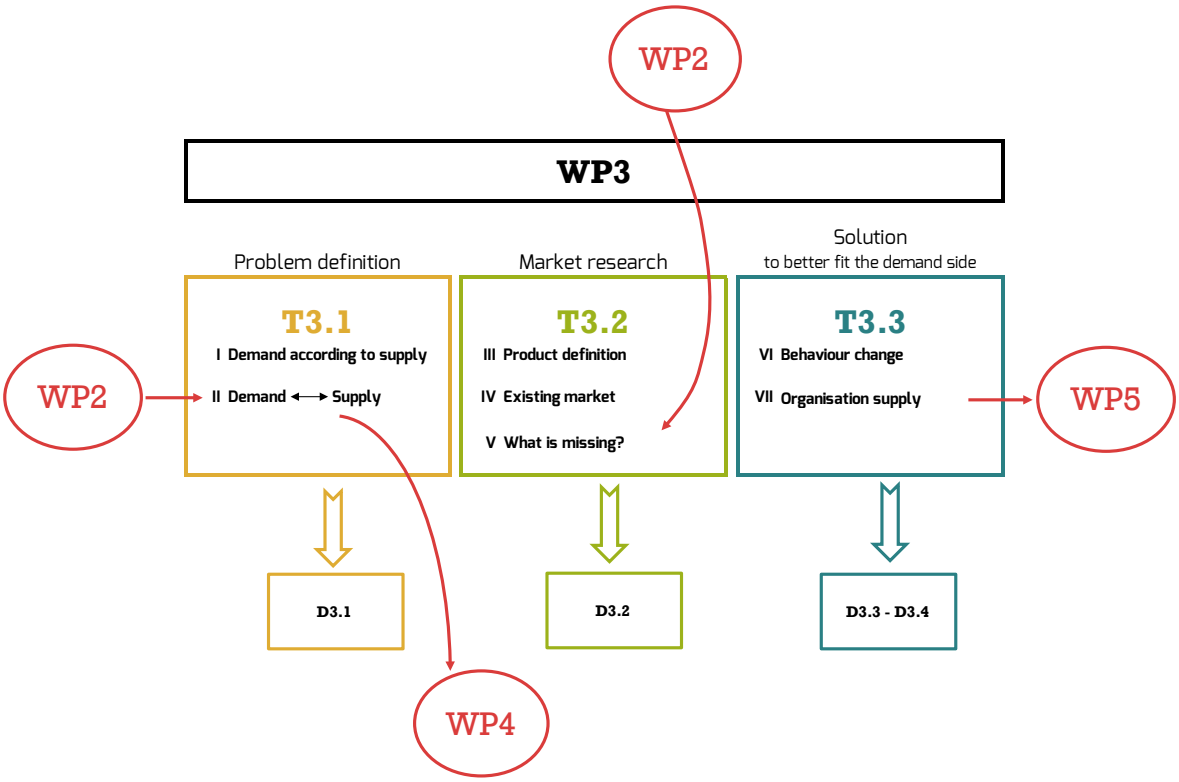

Figure 2: WP3: link with other WP's

This report delivers direct input to task 3.2 and 3.3, to task 4.1 and to task 5.1.

In report 3.2 insight will be gained into existing renovation solutions that are already on the market or very close to market introduction. Finally, in report 3.3 an approach to increase the involvement and organization of the supply side will be developed. In WP4 the most compelling offer to be offered by the supply side to the demand side is developed, starting from the results of earlier work packages. Task 4.1 ('Converting technologies') will cross-link the demand-side drivers (determined in WP 2) with the technical or organizational solutions developed in WP3. WP5 will identify how to ensure high quality and delivery standards. First, in task 5.1 an approach for quality and performance assurance in defined. Second, task 5.2 creates a blue print for an independent organisation that monitors and checks the achieved energy efficiency.