



Deliverable 4.1

Demand - Supply Combinations

GA N° 649865

Project acronym:

REFURB

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Dissemination level

Public

May 2016



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 649865

Summary

The REFURB project focuses on bringing forward solutions to solve the complex interplay and gap between demand and supply in renovation of the residential sector working towards Nearly Zero Energy Buildings (NZEB). Previously, in the REFURB project a mapping of the Supply and Demand side, relevant for NZEB-renovation has been carried out. In this report a solid overview of the main findings of this work is used as input for a **cross-link of the Demand drivers and Supply solutions**. It is the first step towards bridging the gap between Supply and Demand and develop renovation packages of “offers you can’t refuse”.

The general method applied for the development is illustrated in **Error! Reference source not found.**

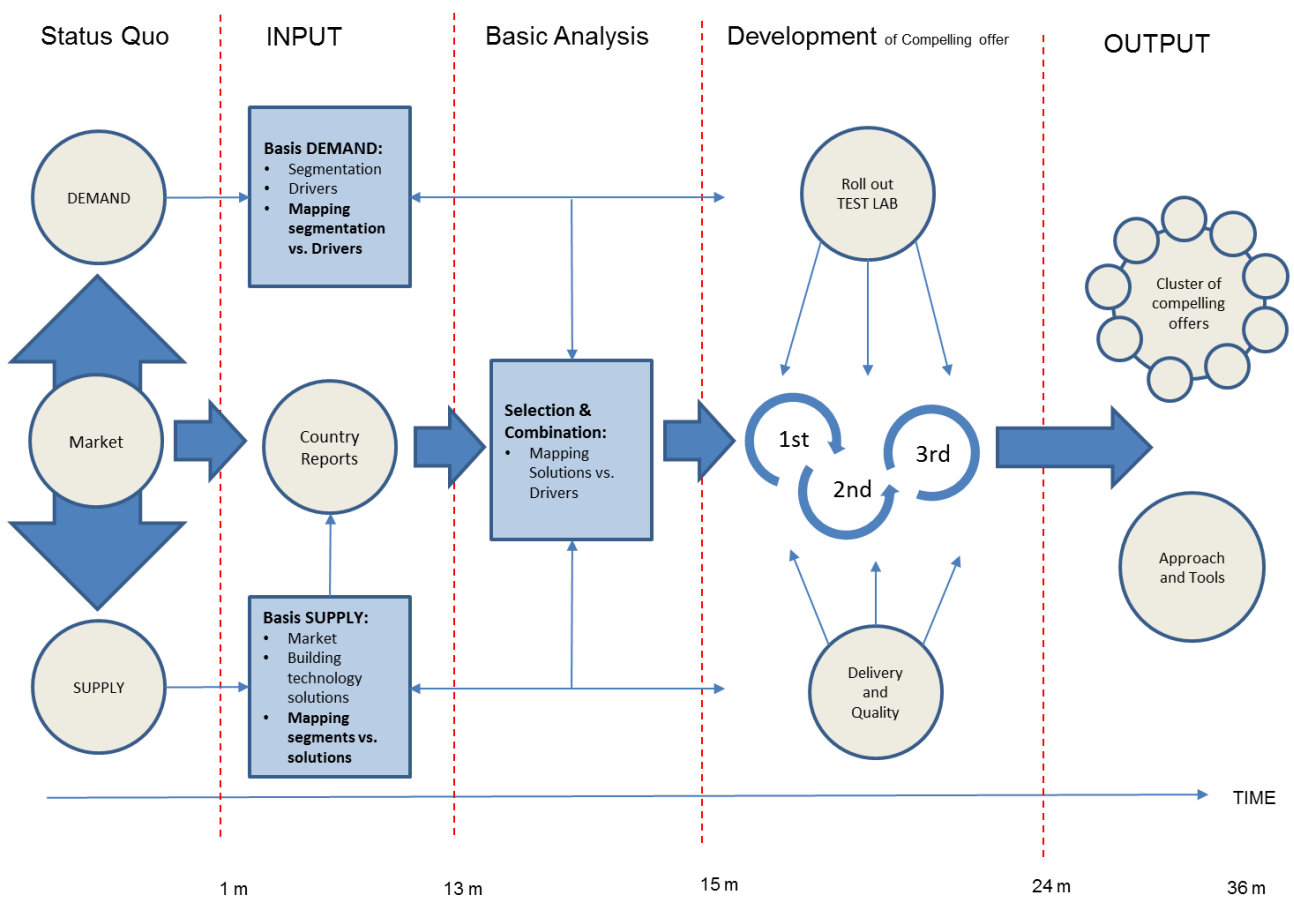


Figure 1 Method for designing “An offer you can’t refuse”, incl. a timeline for the development in month (m).

The interplay between Segments, Drivers and Solutions is key and is roughly illustrated in Figure 2 as the three are all connected and must be considered when designing offers to the home owner. The complexity is untangled by simplifying, clustering characteristics into main categories and by **looking at one segment at a time**, consisting of an identified specific Dweller and Dwelling. By doing so it is possible to make a cross-link of the main Drivers and most relevant Solutions for a specific segment.

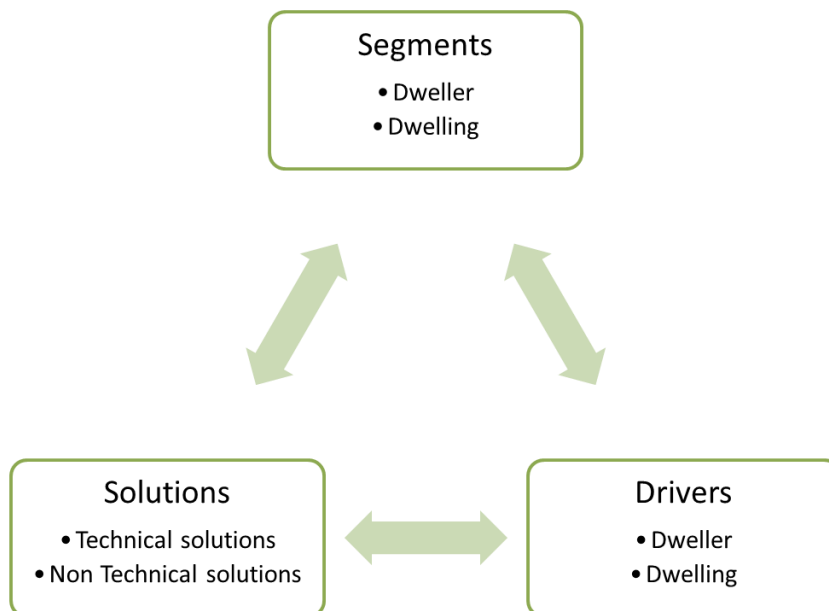


Figure 2 The relationship between Segments, Drives and Solutions

5 generic high potential segments have previously been identified in the REFURB project i.e. in this report, 5 drivers vs. solutions matrixes has been created and the main connection points is visualized. The main conclusion of this analysis is summaries in the tables below:

Young families

Table 1 Top 3 drivers and matching solutions for Young families

Driver	Solution
Have No time, Money or Experience	Need for one-stop-shop and new ways of financing presented at the right moment
Renovation need	All relevant technological solutions should be implemented in order to reach NZEB standard
Largely driven by Social and Behavioural elements, energy saving matters	Need easy tailor made approach and renovation coaching which speaks to values & attitudes.

Post-war suburbs with detached houses

Table 2 Top 3 drivers and matching solutions for Post-war suburbs with detached houses

Driver	Solution
Dominated by technical drivers but the investment cost is a barrier	Need for new ways of financing and cost reduction
Urgency for Renovation	staged renovation offer needed due to cost barrier and to avoid lock ins and to reach the NZEB standard.
Have a high potential for energy saving and react to group action	Need new approaches for organizing the supply solutions including the use of peer pressure and targeted recruitment.

Empty nesters

Table 3 Top 3 drivers and matching solutions for Empty nesters

Driver	Solution
No urgency for renovation	Time to explore Online tools, gather information and make sure to the Quality Assurance is in place
Have Money and Time available and will like to feel confident about the renovation before they go all the way to a NZEB standard	Staged renovation guided with independent advice and expert Renovation coaching
Low energy bill due to low occupancy makes the ROI a barrier	Persuade through Targeted recruitment, Peer pressure and Ambassadors schemes

Terraced houses with a high energy bill

Table 4 Top 3 drivers and matching solutions Terraced houses with a high energy bill

Driver	Solution
Dominated by technical drivers and multiple decision makers (depending on ownership).	Need for New approaches to organizing the supply side providing targeted solutions.
Urgency for renovation and motivation of a lower energy bill.	Renovation packages in a one stop shop or a staged approach depending on the economic situation of the segment.
The legislation and Policy might be a barrier due to regulations on heritage and limitations on external insulation of facade	Need for Government involvement

Convinced energy savers

Table 5 Top 3 drivers and matching solutions for Convinced energy savers

Driver	Solution
First mover segment driven largely by Social and Behavioural elements where Awareness of energy saving potential is a main driver	Quality assurance and online decision making tools are relevant solutions.
Feel secure and are willing to invest, but do not have the financial possibilities	New ways of financing are important solutions.
Technically the building might not need a renovation which makes the business case for energy saving difficult	Focus on Non-financial incentives and Targeted recruitment solutions as this group will serve as the good Ambassadors for others

It is important to emphasize that the identifications of the primary connections at this point only is a **generic justified evaluation** of which solution best matches the identified drivers, based on the research carried out so far in REFURB.

The conclusions will serve as the platform and inspiration for the local tailoring and production of minimum variable products, i.e. prototypes of Renovation Packages creating the first compelling offers.

As emphasised in the method description, it foreseen that many iterations for this work is necessary and the method recommended for this phase is the Lean Startup method by Eric Ries¹.

¹ Ries, E. (2011). *The Lean Start Up method*. Crown Business. Available at: <http://theleanstartup.com/>