



C·REAL

Creation of a
holistic methodology for
Renovation Advice with focus on
Lending solutions differentiated
by Target Group



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General Introduction

The main objective of C-REAL is to establish a permanent, structural collaboration between a mortgage lender (Onesto) and a renovation adviser (Dubolimburg) to increase the degree of renovation and improve renovation quality in the province of Limburg. In addition to this and to achieve full customer satisfaction, an effective cooperation between the renovation adviser and contractors will be set up. Actively involving lenders to encourage home owners and home buyers to renovate provides significant added value.

Lenders play a crucial role in purchasing and are frequently in contact with purchasers. Moreover, based on the existing customer relationship regarding the home, lenders can address owners directly. It is of great importance to lenders that homes that they finance are made optimally energy-efficient and are refurbished qualitatively, as it is believed to reduce their financing risk.

A supply of financing options, combined with a range of services to provide advice and guidance for the renovation, and timely and qualitative execution, provides all parties with significant added value, which paves the way for a clear, solid and scalable business model. In setting up these structural collaborations and offering integrated home renovation services, we will focus on 3 target groups, guiding them through the whole customer journey. We want to support new home owners, existing mortgage clients and ACO's.

Executive Summary

This report contains the evaluation of the pilot projects from phase I of the C-REAL project. We will describe an analysis of specific results such as the characteristics of the homes, the profile of the purchasers, the continuous stages from prospecting to execution of renovation, dropout rates and reasons. We take a closer look at the financing and services provided, the works that were effectively carried out and the impact on the value of the homes as well as on the quality of customer's experience.

Important to keep in mind during reading this report is that we, from the very beginning of the C-REAL project, worked in an agile way. We did this in order to respond quickly to the fast changing financial markets and the rapidly evolving processes and systems developed by the Belgian and Flemish government. And already at the start of our project in September 2020 it became clear that this would be the only way to reach our goals within the project. During the first phase of the project and the pilot projects we were confronted with the Corona crisis, followed by the energy crisis which both caused instable financial markets, a scarcity of goods and materials and the necessity to change our servicing models, adapting them to the new ways of meeting each other.

Both crisis's also had a direct impact on the (number of potential) clients of Onesto, and thus on the number of potential pilots for the C-REAL project. For the target group of the buyers, since more and more people are suffering to pay their monthly costs and, above all, are no longer able to save (enough) money monthly, the potential number of future Onesto clients has climbed to an unseen height. That caused no less than two inevitable temporary credit stops by Onesto: the first credit stop came in the period of April 2021 until July 2021, the second credit stop started already in April 2022 and ended the 30th of September 2022.

Main reason for the first temporary credit stop was the large influx of applications during that period. Onesto features a limited yearly budget and exceeding this budget simply isn't possible. The second temporary credit stop was caused mainly by that same reason but now there also was an important influence of the ongoing war in Ukraine. Because of that war the financial markets became very unstable. For a lender like Onesto, in times of unstable financial markets, it is a big risk to carry on with the daily business.

During both periods almost no new pilot projects within the target group of buyers started the C-REAL trajectory but we were able to focus more on the target group of existing mortgage clients instead. The existing mortgage clients, at their turn, are vulnerable for the impact of the energy crisis. We noticed an increase in the number of clients willing to think about how to make their homes more energy efficient.

1 Target group of Buyers

We started experimenting with our first pilots in January 2021. At that moment we had created a first basic methodology (*see Report D3.7 Developed tools and documents*).

In total we serviced 49 pilots from the period of January 2021 until the end of September 2022. This period contains 21 months of which we suffered from a temporary credit stop during 9 of them. So in fact we conducted this pilots in 12 months, or on average we were able to service 4 pilots a month. Only from 1 pilot we weren't able to receive additional information (EPC Label, purchase price...) after the renovation advice started.

Due to our agile methodology we were constantly evaluating the pilots and the processes. Because of that methodology we could tackle thresholds and problems very efficiently and we were able to draw lessons from every pilot and optimize our methodology in order to make the process for the following pilots even more efficient, transparent and fluent.

1.1 Methodology

First we will describe the developed methodology for this target group of Buyers, and how we, thanks to our agile way of working, optimized it on the go.

1.1.1 The credit application

First step in the process is the credit application. The application comes to Onesto from a credit broker or is the consequence of a customer that informed himself in one of the Onesto offices in Flanders.

No matter how the application arrives at Onesto, the process stays the same: First we check the EPC value of the dwelling bought. If the value is higher than (250) 300, the application is allocated internally to (one of) the renovation supervisors of Onesto. In practice, the front office creates a command in the DMS of Onesto (CBS system) wherein the front office states that the EPC value is above (250) 300 and asks to contact the client as soon as possible in order to explain the consequences and the possibilities.

1.1.2 The first meeting with the customer

In this phase, things can be different, depending on how the application arrives at Onesto. If it is a client that came directly to the Onesto offices, the first meeting is the one in which he/she is informed about the conditions to get a mortgage loan provided by Onesto. During that meeting, the first explanations about the EPC value, renovating and the C-REAL project are already given. In fact, the meeting of the effective application is the second meeting then.

If the customer first met with a credit broker, the meeting with the customer really is the first meeting of the customer with the Onesto employee.

FIRST INTERVENTION – optimization of the process

After a few pilots, we noticed that the information we communicated to the credit brokers about EPC value, renovating obligations and the C-REAL project was not sufficient. Customers seemed not to be aware (of some parts) of the process after the application, and

often the application itself seemed not to be complete (lack of detailed budget foreseen for renovation works).

That is why we tried to optimize this first phase in the customer journey: in spring 2021 we visited all credit brokers who we work together with. During those meetings we handed over the step-by-step plans, we explained the project and its possibilities once again in detail and we made some agreements about how a credit application has to look like to facilitate the process for the customer and the Onesto employees.

From that point on, we noticed the customers were much more aware of what to expect when meeting an Onesto employee after applying for a mortgage loan.

1.1.3 Follow-up e-mail and signing the C-REAL privacy statement

After that first meeting we always send a follow-up e-mail to the customer in which we repeat, summarized, the matters discussed and in which we explain once again the next steps to follow. In that e-mail the customer can find the privacy statement, which we discussed during the first meeting and the demand to sign it in order to start the C-REAL project.

In Deliverable D3.7 we will discuss the developed step-by-step plan to better inform the customer about the next steps and to give an overview of what to expect during the runtime of the C-REAL project.

1.1.4 Signed statement and Synergy

Once the customer sends back the signed privacy statement for participating at the C-REAL project as a pilot, the customer has agreed on sharing their contact data to the renovation advisor of Dubolimborg vzw.

At this point we put the necessary data of the customer into the Synergy DMS. The renovation advisor receives a command in the DMS to contact the customer in order to visit the dwelling.

SECOND INTERVENTION – optimization of the process

In the first weeks we noticed that the commands in the Synergy DMS not always functioned as we wished for. Or, in a few pilots we noticed that the DMS wasn't always sufficient to communicate in detail to the renovation advisor the concrete wishes and plans of the selected pilots.

That is why we, from that point on, have set up a weekly meeting between the Onesto co-workers and the renovation advisor of Dubolimborg at a fixed time (every Wednesday morning at 9am).

That idea seemed successful, it led to a better understanding between both parties and a better follow-up of the pilots and the lead time. In Deliverable D3.7 we will discuss the tool developed to make agreements on the lead time and the standardized e-mail, send by the renovation advisor to inform the customer about the coming visit of the dwelling.

1.1.5 The first meeting with the renovation advisor and the visit of the dwelling

Once the renovation advisor has fixed a date to visit the dwelling, also a preface online meeting is arranged for, if the customer at least is able to meet online, otherwise this phase is skipped. The online meeting is the first meeting between the customer and the renovation advisor. The purpose of this meeting is to facilitate the home visit afterwards (time saving for the renovation advisor). During this online meeting the renovation advisor discusses what he/she needs upfront (plans of the dwelling for example), to make the home visit go more smoothly.

1.1.6 The renovation report and the follow-up meeting with the financial advisor of Onesto

First, some words about the cost estimation, provided by the renovation advisor. Before we serviced the first project pilots we already agreed on the importance of not only taking into account the energetic works, but also to look at the structural works and the wishes of the clients such as the bathroom, the kitchen or the electricity works.

In the cost estimation, these works are foreseen. But after this first series of pilots the LEARNING LESSON here is that for the renovation advisor of Dubolimborg it is very time consuming to take into account these works. But because of the importance of it, in order to convince the customer of doing a deep renovation, we agreed on continuing this process. We also assume, that the more pilots are in the project, the more easy it will become to estimate the costs for such works because of the greater experience and the examples of pilots in the past.

LEARNING LESSON

To convince the customer of a deep renovation, it is necessary to give him/her as many detailed information as possible for all his/her needs, wishes and priorities. But we have to keep underscoring the importance of the logical order in which to conduct the works.

Furthermore, we discovered that this phase is crucial in how the renovation process will continue subsequently: the follow-up meeting with the financial advisor of Onesto. During this meeting the renovation report and the cost estimation is discussed. Why is this meeting of such importance? Because at this point in the customer journey, the client is in desperate need of information about the feasibility of his/her project as a whole. This means about the purchase financing and the wishes and needs for renovation.

Why we think it is better to discuss the renovation report and cost estimation directly with the financial advisor? Because the financial advisor is capable of immediately linking it back to the financial feasibility. And it is the feasibility where the client is eager about at this point. The client is, at least during this phase, not curious about the technical details of his/her renovation. The client wants to know as soon as possible if the plans he/she has in mind are realistic (in a financial point of view).

Probably, after this first series of project pilots, this is one of the most important learning lessons of the C-REAL project both for the Target group of Buyers as well as for the Target group of Existing Mortgage Clients (which we will discuss later).

1.1.7 Approval of the mortgage loan and the start of the renovation guidance

Once the report is discussed and the customer has made his choice about how, what and when to renovate, the financial plan becomes final. The analyst of Onesto checks the application for the mortgage loan and the authorized persons of Onesto approve or decline the application.

In most cases, because of the pre-screening of the files, the application is approved. When this phase is reached, the Onesto co-worker has to signal this in the Synergy DMS so the renovation advisor knows he can go on to the process of renovation guidance.

The customer receives another e-mail in which is stated for which services he/she can count on by which advisor (financial or renovation).

THIRD INTERVENTION – optimization of the process

During this first project pilots we have noticed that it really depends on the type of the customer if and how many times the customer uses the services provided by the renovation advisor. But one thing is sure: repeating the message several times is necessary. To facilitate this a bit during the second series of project pilots we will create an extra file with a more detailed explanation of the services provided by the C-REAL project. The renovation advisor has noticed that it is also necessary to provide more explanation about, for example, the difference between an offer and an invoice (often the customer literally doesn't know the difference between an offer and an invoice).

1.2 Characteristics of the homes

1.2.1 Type

As was stated in the goals of C-REAL we are able to select both apartments and houses. Of the 49 pilots, selected so far for the target group of Buyers, only 3 of them are apartments.

1.2.2 Year of Construction

The oldest home is built in the year 1850, the youngest home in the year 2006. Furthermore 11 homes are built in the period before 1950. 13 homes are built in the period from 1950 to 1959, 11 homes are built in the period from 1960 to 1969, 10 are built in the period from 1970 to 1979 and only one home was built during the 80's (1987).

< 1950:	11 homes or 22%
1950 – 1959:	13 homes or 28%
1960 – 1969:	11 homes or 22%
1970 – 1979:	10 homes or 20%
1980 – 1989:	1 home or 2%
>1990:	1 home or 2%
Unknown:	2 homes or 4%

Let's have a look at the year of construction in correlation to the EPC values and the estimated value of the homes. Numbers are still premature, but maybe we can already discover an interesting correlation on which we can build for the future pilots.

- Average value of homes < 1950: 206 454,55 euro
- Average value of homes > 1950: 214 083,33 euro

As we can deduct, no clear correlation is found between the age of a home and its estimated value.

- Average EPC value of homes < 1950: 475 kWh
- Average EPC value of homes > 1950: 502 kWh

As we can deduct, no clear correlation is found between the age of a home and its EPC value, on the contrary, newer houses have a slightly higher average EPC value.

- Average cost of renovation of homes < 1950: 45 857 euro
- Average cost of renovation of homes > 1950: 34 552 euro
- Average number of measures of homes < 1950: 4
- Average number of measures of homes > 1950: 2,97

At first sight, it seems like the renovation cost of homes < 1950 is significantly higher than that of homes > 1950. Also the number of measures being conducted is higher for older homes. Certainly something we could have expected and something we should investigate further within the C-REAL project.

1.2.3 Region

Of course, the C-REAL project is meant for homes in the Province of Limbourg. But, because of the need for help and the proximity we also accepted 3 out of 49 pilots from outside the Province of Limbourg (Mol, Zoutleeuw and Geetbets, respectively 10, 2 and 3 kilometres from the border of the Province).

Lommel:	5 homes or 10%
Pelt:	4 homes or 8%
Beringen:	3 homes or 6%
Houthalen:	3 homes or 6%
Zonhoven:	3 homes or 6%
Genk:	3 homes or 6%
Sint-Truiden:	3 homes or 6%
Other province:	3 homes or 6%
Dilsen-Stokkem:	2 homes or 4%
Ham:	2 homes or 4%
Heusden-Zolder:	2 homes or 4%
Leopoldsburg	2 homes or 4%
Maaseik:	2 homes or 4%
Herk-de-Stad:	2 homes or 4%
Bilzen:	1 home or 2%
Bocholt:	1 home or 2%
Hechtel-Eksel:	1 home or 2%
Heers:	1 home or 2%

Lanaken:	1 home or 2%
Lummen:	1 home or 2%
Maasmechelen:	1 home or 2%
Peer:	1 home or 2%
Riemst:	1 home or 2%
Tongeren:	1 home or 2%

If we have a closer look at these figures and we point the homes out on a map of Limbourg, we get this result:

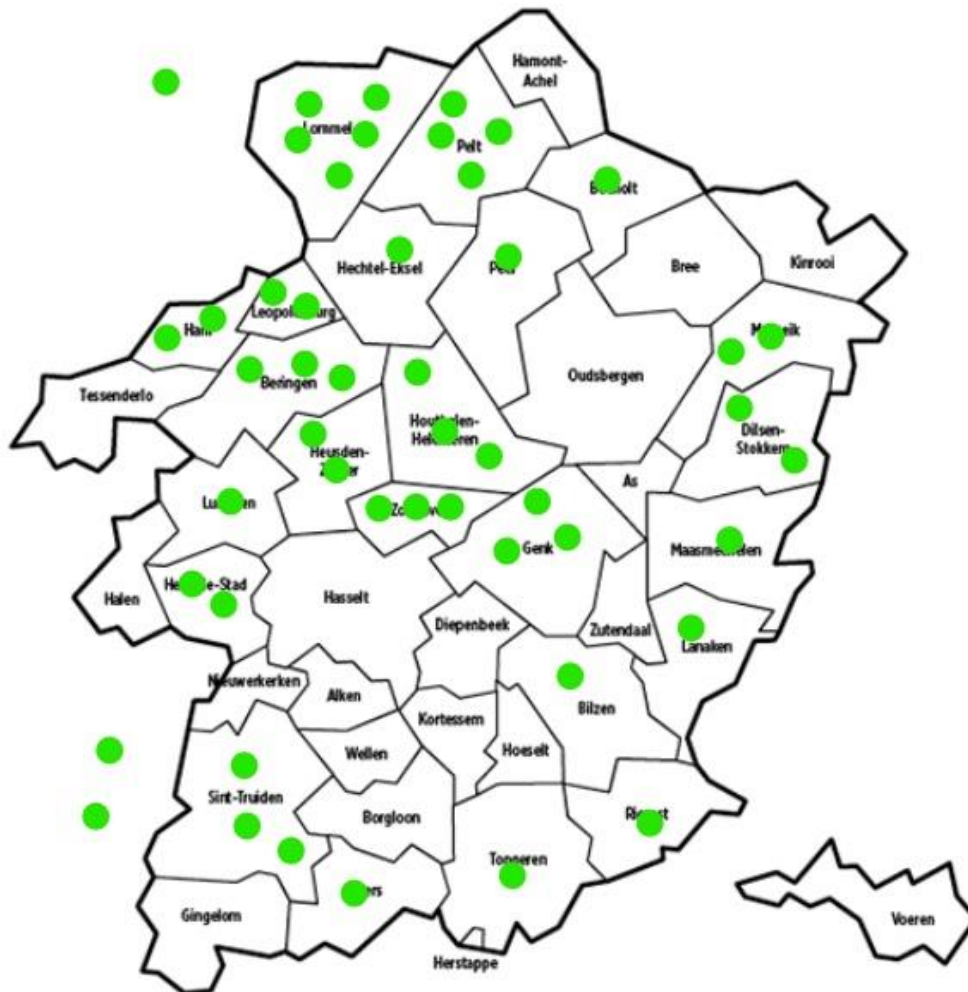


Figure 1 Map of the Province of Limbourg (green bullets represent the pilots phase I)

In our opinion, this spread is caused by two factors. The cooperation with credit brokers in the different regions is one: in the north of Limbourg we have some very enthusiastic and hardworking brokers from Hypotheek.Winkel which have a really good idea of what the C-REAL project is about. They are real promotors of the project. We are also good presented in the region near the Onesto headquarters (Beringen).

In the centre of Limbourg, near Hasselt, only a few pilots were subscribed. Probably this is caused by the purchase prices of the homes. Let's have a closer look¹: In Hasselt the average purchase price of houses is 307 710 euro, followed by Diepenbeek (303 200 euro), Zonhoven (300 917) and Wellen (300 283 euro).

As we match these numbers with the map above we see clearly that the number of pilots per city is closely linked to the average purchase price in that specific cities.

Tabel 1 Average purchase prices of houses in the Province of Limbourg

Hasselt	307.710,00
Diepenbeek	303.200,00
Zonhoven	300.917,00
Wellen	300.283,00
Ham	299.000,00
Herk	282.313,00
Zutendaal	275.302,00
Borgloon	273.221,00
Maasmechelen	264.634,00
Sint-Truiden	257.030,00
As	254.736,00
Genk	226.997,00

1.2.4 EPC Labels

In Flanders, as a seller of a home, it is obliged to deliver an EPC Report to the buyer. Within the target group of Buyers we thus have a clear view on the EPC Labels of the homes. We also selected some homes that scored just below the C-REAL selection criteria (EPC > 300 for houses and EPC > 250 for apartments). We did this because of the demand and the need for help coming from those buyers, in order to make their homes even more energy efficient.

- Highest EPC Value: 970 kWh
- Lowest EPC Value: 246 kWh

LABEL C (200 – 300 kWh): 6 pilots or 12% (from which 3 are apartments)

LABEL D (300 – 400 kWh): 10 pilots or 20%

LABEL E (400 – 500 kWh): 13 pilots or 27%

LABEL F (500 - ... kWh): 19 pilots or 39%

LABEL UNKNOWN: 1 pilot or 2%

- Average EPC value of houses for this first project pilots: 525,70 kWh
- Average EPC value of apartments for this first project pilots: 270 kWh

Is there a correlation between the average estimated value of the homes and the EPC value? Let's have a look.

¹ www.tijd.be, 17/02/2022, Thomas Laureys

- Average estimated value of houses > 525,70 kWh: 205 861,11 euro
- Average estimated value of houses < 525,70 kWh: 217 537,04 euro

As we can deduct, the estimated value of houses with a higher EPC value is significantly lower than for houses with a lower EPC value, as we can expect.

Already 3 pilots completed their renovation works and they reached concrete results with regard to their EPC labels:

- 1 pilot jumped from EPC Label F (558 kWh) to an EPC Label B (172 kWh)
- 1 pilot jumped from EPC Label E (464 kWh) to an EPC Label C (265 kWh)
- 1 pilot jumped from EPC Label D (311 kWh) to an EPC Label C (260 kWh)

1.2.5 Purchase prices

Concerning the purchase prices we have to distinguish between buyouts and new purchases. During this first phase of pilots there were 4 buyouts (takeover of the house by one of both partners/owners) and 45 new purchases. Why do we have to distinguish here? Because otherwise a distorted picture will arise about the average purchase prices. The purchase price of a buyout often is only half the value of the house, often even minus the outstanding debt.

For 48 of the 49 pilots the purchase price is a known variable (1 of the 49 pilots concerns a possible buyout which did not yet proceed). And 4 of them regard buyouts. Of the 45 new purchases, the lowest purchase price was 140 000 euro (house from Maasmechelen, construction year 1959, EPC Label F, 538 kWh). The most expensive house had a purchase price of 275 000 euro (house from Zoutleuw, construction year 1978, EPC Label D, 323 kWh).

The average purchase price for new purchases is 207 559 euro. When financing a purchase or a renovation with Onesto, an estimation of the value of the home is necessary. For a lender this is crucial to know how secure the financing of a project is. The average value of the homes, for the new purchases, is 209 844 euro. This means the price paid and the value estimated strongly correlate, which is good news for the lender.

For the buyouts, the average price of the buyout is 96 000 euro, the average estimated value of the home as a whole is 245 000 euro.

1.2.6 Renovation

Of course, in the C-REAL project it is all about renovation. When selecting a project pilot the goal is to make the home of this pilot more energy efficient. So we find it very useful to have a look at the (estimated) renovation costs of the selected pilots, the (estimated) number of energy efficient measures, the part of the mortgage loan for renovation, if there is an additional (energy) loan for renovation and the (potential) jump in EPC Label that comes with it.

The estimated renovation cost

Because we are only in phase I of the C-REAL project it is very premature to talk about a concrete cost for renovation. Many renovation projects are still going on, only 3 of our pilots within the target group of buyers have already finished their renovation works. But still, it is useful to have a close look at the estimated cost for renovation. The estimated cost certainly has an important value for a lender, because of the risk assessment of the financing project. Furthermore, the estimated cost for renovation is based on the estimation made by the renovation advisor and this estimation is translated into a so called financing plan. This financing plan is a very important document for both the lender as well as for the customer. It contains the works that have to be conducted and it is a mechanism of control for paying invoices once the works have started. Only if the works are included in the plan, the invoices will be paid by the lender.

Of course, it is only after the renovation is finished we will get a well-funded view on the real cost of the global renovation. We will discuss this in detail at the end of the project, but in what follows we already try to create an intermediate state so we can learn from it and try to optimize the cooperation between the renovation advisor and the lender.

First of all, let's talk about the 3 pilots that already have finished their renovation works:

- 1 pilot jumped from EPC Label F (558 kWh) to an EPC Label B (172 kWh)
 - Estimated cost of renovation works: 27 000 euro
 - Number of measures: 3
 - Mortgage Loan: 27 000 euro (VRK)²
- 1 pilot jumped from EPC Label E (464 kWh) to an EPC Label C (265 kWh)
 - Estimated cost of renovation works: 40 000 euro
 - Number of measures: 4
 - Mortgage Loan: 20 000 euro (VRK)
- 1 pilot jumped from EPC Label D (311 kWh) to an EPC Label C (260 kWh)
 - Estimated cost of renovation works: 15 000 euro
 - Number of measures: 3
 - Mortgage Loan: 15 000 euro

As one can see, it is very difficult to draw conclusions from this 3 pilots and their renovation works and budgets. It is dangerous to state that even with a limited budget one can make a big jump in EPC level, because much depends on which measures have to be conducted, whether someone can conduct many renovation works himself and many more factors that will be discussed once the second phase of projects pilots will start running.

Let's take a look at the 49 pilots in general:

- 35 pilots already started their renovation works (3 finished, see above)
- 8 pilots are still in the phase of renovation advice, it is still too early to estimate their renovation costs
- 6 pilots are not going to start any renovation works, even after the renovation advice

² VRK = Vlaams Renteloos Renovatiekrediet, an initiative by the Flemish Government, a mortgage loan from which the government subsidizes the interest.

- 1 because of lack of budget (EPC label D, 311 kWh)
- 1 because after renovation advice renovation seemed not urgent (EPC label C, 296)
- 1 because buyout was cancelled
- 1 because credit application was cancelled because of fraud
- 1 because after the renovation advice they decided not to buy the house because renovating it turned out to be too risky
- 1 we don't know the sequel because they eventually chose for another lender

At this point in the C-REAL project it is useful to look at the numbers of the 35 pilots who already started their renovation works (or even finished it).

- Average estimated cost for renovation: 37 800 euro
- Average mortgage loan for renovation: 27 514 euro
- Average number of measures: 3,43
- In 5 cases they added an additional energy loan, provided by the Flemish government, to their mortgage loan
 - Average loan: 24 000 euro

Furthermore, as a lender but also as a home owner, it is interesting to know what the added value of the renovation works is concerning the value of the home. But again, these numbers are very premature to draw some useful conclusions out of them.

- From 41 of the pilots we already have an estimation with the value of the home, after the (potential) renovation works are finished
 - Average value after renovation works: 237 273 euro
 - We can compare this number with the average value of the homes before renovation works: 207 559 euro
 - We can deduct that renovation works will increase the value of the homes with about 30 000 euro

1.3 Profile of the purchasers

1.3.1 Single or couple

In total 49 pilots were selected for the Target group of Buyers. No less than 25 of these 49 (51%) pilots concern singles. So in total there are 73 persons involved in this first series of pilots.

1.3.2 Age

The average age of all pilot persons is 35,56 years. That of the singles is higher: 37,92 years. The average age of the couples, on the contrary, is significantly lower: 35,11 years.

- Average age all pilots: 35,56 years
- Average age single pilots: 37,92 years
- Average age couple pilots: 35,11 years

This difference can be explained very easily: In the group of the single pilots in 4 out of 25 cases there was a buyout after a divorce, in 7 out of 25 cases the purchase happened after a divorce and the pilot was the one who was bought out. So in almost half (11 out of 25, 44%)

of the single pilots, a divorce was the main reason to start over again. And of course, a divorce mostly happens when people are somewhat older, so this can be a good explanation of the difference in average age between the single and the couple pilots.

1.3.3 Gender

In total, in the Target group of Buyers, 73 people are involved, 39 of them are female (53%) and 34 of them are male (47%). Singles: 16 out of 25 pilots within the group of the singles are female (64%), whereas 9 are male (36%). So, especially in the group of single pilots women are overrepresented.

1.3.4 Status of employment

In total, of the 73 people involved as a pilots, 22 are labourers (30% of all people involved). For 3 of the couple pilots both partners are labourer (13% of couples). Furthermore, 37 people have the status of a (civil) servant (50,6%), 6 people are entrepreneur (8%), 3 people are disabled (4%), 2 people are unemployed (3%), of 2 people we do not have any information on their status of employment (3%) and 1 person is retired (1%)

Tabel 2 Status of employment

Labourer	22	30%
Servant	37	50,60%
Entrepreneur	6	8%
Disabled	3	4%
Unemployed	2	3%
Unknown	2	3%
Retired	1	1%

2 Target group of Existing Mortgage Clients

Our first pilots within the target group of existing mortgage clients date from February 2021. We did not approach clients proactively during that first period. We only reactively selected our existing customers as C-REAL pilots. For Onesto, this was of strategic importance because there were some structural changes ahead.

Later, in spring 2022, we started experimenting with proactive mails and telephone calls to trigger our existing mortgage clients into (deep) renovation.

Of course, due to our agile way of working, we could constantly optimize and structure our methodology.

In total we managed to select 27 pilots for this target group. One of the pilots ended just after receiving the renovation report and the cost estimation. Their house turned out to be in a very bad condition, renovating it would not help, except with a very high investment.

2.1 Methodology

Before going deeper into the characteristics of the homes and pilots selected, we describe the methodology we used and we optimized during the first series of project pilots, as a consequence of our agile methodology.

To give a good insight in this methodology, it is crucial to distinguish between the customers that were reached reactively and those who were triggered proactively.

Reactive versus proactive selected pilots

19 out of 27 pilots (70%) within this target group were selected after a reactive contact. This means, it was the initiative of the client to call Onesto because of a question about renovation.

The other 8 pilots (30%) are selected after sending a proactive test mail to a small selection of only 20 existing mortgage clients.

In what follows we will first focus on the methodology for the reactive selected pilots and further on we will describe the methodology for the proactive way of selection.

2.1.1 Methodology for reactive selected pilots

Because a reactive selected pilot took the initiative to contact Onesto, for this focus group the difficulty lies in convincing the pilot to look at the broader picture of the renovation. This customer typically has a concrete renovation in mind, often he/she wants to renew the kitchen or the bathroom. Key here is to have this customer an EPC and a renovation report drawn up.

2.1.1.1 The first contact with the customer

The customer contacts an Onesto co-worker by telephone or by mail or through their credit broker. He/she wants to know what the possibilities are to finance their renovation idea they have in mind.

LEARNING LESSON

A first learning lesson we do have to share is that during this first contact with the customer it is of extreme importance to listen very well to what the customer wishes. Do not immediately block his/her wishes. Try not to convince the customer immediately about an energetic renovation.

Instead, be accommodating and clearly point out that you are willing to take into account the wishes or demands of the client. But also make clear that, for you as a lender, it is very useful and important to first have a look at the current state of the dwelling: suggest that you can help to overthink the renovation carefully and give the first information about the C-REAL project and its opportunities.

FOURTH INTERVENTION – optimizing the process

Of course, not every customer has the patience or is willing to let investigate first the current state of the dwelling before getting clearness about the renovation and the financing of it. Therefore it is wise to install some other instruments with which you can try to stimulate the situation towards energetic renovation:

- The eco-interest rate: as long as the customer cannot prove to possess an EPC with a value below 300, the interest rate is increased by 0,25%
- Talk about the possibility to refinance the current mortgage loan (if payable, depending on the financial market situation of that moment), if the customer meets some preconditions (low EPC, renovation report, lower loan to value...)

Once the customer is convinced to take part of the C-REAL project, the methodology is similar to that of the proactive selected pilots.

2.1.2 Methodology for proactive selected pilots

To proactively select some pilots for the target group of existing mortgage clients we experimented with a proactive mailing.

For a first mailing we selected 10 existing customers with no or a bad EPC in the past, at the moment of financing their purchase. We tried to trigger the customer by suggesting taking part in the C-REAL project in order to discover together if the customer qualifies for a refinancing of their mortgage loan. In Deliverable D3.7 we will discuss this mail template in detail.

From that first mailing, 3 customers did want to take part in the project. Because of this success rate we sent out a second mailing, again to 10 other existing mortgage clients. And again, the mailing seemed successful: no less than 5 new pilots were selected.

2.1.2.1 The first contact with the customer

After the proactive mailing, the customers that showed interest were contacted by telephone. During that first personal contact the C-REAL project was explained in detail and the steps to follow were discussed, so the customer had a clear view on what to expect as an

outcome. The steps to follow are the same as stated in the step-by-step plan every selected pilot receives. In deliverable D3.7 we discuss this in detail.

LEARNING LESSON

In order to reach the existing mortgage clients it is key to trigger them in some kind of way. In this first series of project pilots we managed clearly to trigger them by pointing out the financial advance they possibly could make use of.

Point of attention:

From the 8 selected pilots with no or a bad EPC in the past we noticed, after signing the privacy agreement and having appointed an EPC reporter, that the EPC reports seemed much better than we could have expected. Six of them already managed to jump under the limit value of 300:

- Label C – 291 kWh
- Label C – 235 kWh
- Label B – 121 kWh
- Label B – 192 kWh
- Label B – 146 kWh
- Label B – 163 kWh

For 2 of them there still was some work to do:

- Label E – 487 kWh
- Label F – 501 kWh

Because they agreed being selected as a C-REAL pilot, despite the low EPC values, we let them take part of the rest of the process, to make them at least aware how they can make their dwellings even more energy efficient. Furthermore, we think these figures are promising for a lender: 30% of the proactively approached customers have succeeded to make their homes more energy efficient without applying for a new loan.

Once the customer is convinced to take part of the C-REAL project, the methodology is similar to that of the reactive selected pilots.

2.1.3 Methodology after having signed the privacy statement

For both focus groups, reactively and proactively selected pilots, the process is the same after the privacy statement has been signed.

2.1.3.1 EPC and Synergy

If the customer has no EPC yet or has an EPC of the past but conducted some works during the years, first an EPC reporter is appointed (see deliverable D3.7 for the cooperation agreements with the selected EPC reporters for the Province of Limbourg). At the same time, the necessary data of the pilot is shared in Synergy, in which the renovation advisor is given a command to contact the pilot.

2.1.3.2 The first meeting with the renovation advisor and the visit of the dwelling

Once the renovation advisor has fixed a date to visit the dwelling, also a preface online meeting is arranged for, if the customer at least is able to meet online, otherwise this phase

is skipped. The online meeting is the first meeting between the customer and the renovation advisor. The purpose of this meeting is to facilitate the home visit afterwards (time saving for the renovation advisor). During this online meeting the renovation advisor discusses what he/she needs in front (plans of the dwelling for example), to make the home visit go more smoothly.

2.1.3.3 The renovation report and the follow-up meeting with the financial advisor of Onesto

First, some words about the cost estimation, provided by the renovation advisor. Before we serviced the first project pilots we already agreed on the importance of not only taking into account the energetic works, but also to look at the structural works and the wishes of the clients such as the bathroom, the kitchen or the electricity works.

2.1.3.4 Approval of the mortgage loan and the start of the renovation guidance

Once the report is discussed and the customer has made his choice about how, what and when to renovate, the financial plan becomes final. The analyst of Onesto checks the application for the mortgage loan and the authorized persons of Onesto approve or decline the application.

In most cases, because of the pre-screening, the application is approved. When this phase is reached, the Onesto co-worker has to signal this in the Synergy DMS so the renovation advisor knows he can go on to the process of renovation guidance.

The customer receives another e-mail in which is stated for which services he/she can count on by which advisor (financial or renovation).

2.2 Characteristics of the homes

2.2.1 Type

Only 1 home in this target group is an apartment. The 26 other pilots all are houses.

2.2.2 Estimated Value of the homes

For the existing mortgage clients we have to rely on the estimated values of the moment of the purchase in the past before renovation works or after renovation works, if we are sure that the renovation works, stipulated in the estimator's report, effectively are conducted.

To adapt these values 'of the past' to the current market value, in cases for which we can not rely on a recent estimation, we make use of the table/formula which one can find in what follows (Figure 2). However, for most cases, once they are concrete, we appoint an estimator to get a well-funded view on the current market value. For a lender, it is of too much importance to be able to estimate the risk of approving for a(n) (extra) loan. But for now, we rely on the available figures to do a first analysis of this series of project pilots.

- Overall average value of homes: 230 478 euro
- Average value of homes < 1950: 215 500 euro
- Average value of homes > 1950: 229 375 euro

If we compare this to the average value of the homes for the Target group of Buyers:

- Average value of homes < 1950: 206 454,55 euro
- Average value of homes > 1950: 214 083,33 euro

If we have a look at the EPC values for both target groups at the same time, we can, with some proviso, state that renovating the home to a lower EPC value does increase the value of the homes in a significant way.

JAAR	MEDIAAN KOOPPRIJS	STIJGING WAARDE	MEDIAAN KOOPPRIJS	STIJGING WAARDE
1990	50.937	358,41%	47.161	309,23%
1991	53.987	332,51%	51.247	276,61%
1992	57.853	303,61%	51.470	274,97%
1993	60.738	284,44%	52.838	265,27%
1994	64.306	263,11%	54.926	251,38%
1995	66.506	251,10%	56.555	241,26%
1996	70.082	233,18%	59.598	223,84%
1997	72.446	222,31%	58.951	227,39%
1998	77.800	200,13%	58.902	227,66%
1999	86.980	168,45%	65.806	193,29%
2000	93.472	149,81%	72.751	165,29%
2001	99.752	134,08%	75.541	155,49%
2002	110.859	110,63%	82.301	134,50%
2003	113.802	105,18%	89.670	115,23%
2004	119.987	94,60%	99.617	93,74%
2005	142.736	63,59%	114.364	68,76%
2006	154.879	50,76%	129.937	48,53%
2007	167.890	39,08%	137.946	39,91%
2008	177.623	31,46%	140.739	37,13%
2009	178.107	31,10%	142.734	35,22%
2010	185.000	26,22%	150.000	28,67%
2011	190.000	22,89%	154.500	24,92%
2012	192.000	21,61%	163.000	18,40%
2013	195.000	19,74%	165.000	16,97%
2014	195.000	19,74%	165.000	16,97%
2015	200.000	16,75%	170.000	13,53%
2016	200.000	16,75%	175.000	10,29%
2017	210.000	11,19%	177.500	8,73%
2018	215.000	8,60%	185.000	4,32%
2019	228.000	2,41%	189.000	2,12%
2020	233.500	0,00%	193.000	0,00%
2021	233.500	0,00%	193.000	0,00%
2022	233.500	0,00%	193.000	0,00%
vul gele velden in				
Pand (selecteer dropdown)	Woning			
Verworven door (selecteer dropdown)	Aankoop			
Aankoopprijs	€ 220.000			
Renovatiekost (incl. lening)	€ 0			
Gekocht in jaar	2017			
Evolutie marktprijs	11,19%			
> Stijging @60%	6,71%		Waarde	€ 244.619
			Waardeverhoging	€ 0

Figure 2 Formula for current market value

2.2.3 Year of construction

The oldest home is built in the year 1918, the youngest home in the year 2014. Furthermore 2 homes are built in the period before 1950. 3 homes are built in the period from 1950 to 1959, 4 homes are built in the period from 1960 to 1969, 3 are built in the period from 1970 to 1979 and only 1 home was built during the 80's (1980), 2 were built in the 90's and 3 in

the years 2000 (2008, 2009 and 2014). From 9 out of 27 homes we don't have accurate data concerning the year of construction.

< 1950:	2 homes or 7%
1950 – 1959:	3 homes or 11%
1960 – 1969:	4 homes or 15%
1970 – 1979:	3 homes or 11%
1980 – 1989:	1 home or 4%
>1990:	5 homes or 19%
Unknown:	9 homes or 33%

Let's have a look at the year of construction in correlation to the EPC values and the estimated value of the homes. Numbers are still very premature, certainly for the group of Existing Mortgage Clients (27 pilots in total), but maybe we can already discover an interesting correlation on which we can build for the future pilots.

- Average value of homes < 1950: 215 500 euro
- Average value of homes > 1950: 229 375 euro

As we can deduct, though there is only a slightly difference, no clear correlation is found between the age of a home and its estimated value.

- Average EPC value of homes < 1950: 820,5 kWh
- Average EPC value of homes > 1950: 334,6 kWh

As we can deduct, at first sight a strong correlation is found between the age of a home and its EPC value, but because we only have a sample of 2 homes built before 1950, this correlation is not funded at all.

2.2.4 Region

Of course, the C-REAL project is meant for homes in the Province of Limbourg. But, because of the need for help and the proximity we also accepted 3 out of 49 pilots from outside the Province of Limbourg (Mol, Zoutleeuw and Geetbets, respectively 10, 2 and 3 kilometres from the border of the Province).

Houthalen	4 homes or 15%
Maasmechelen	3 homes or 11%
Leopoldsburg	2 homes or 7%
Ham:	2 homes or 7%
Lommel	1 home or 4%
Pelt	1 home or 4%
As	1 home or 4%
Hoeselt	1 home or 4%
Kinrooi	1 home or 4%
Herk-de-Stad	1 home or 4%
Beringen	1 home or 4%
Hasselt	1 home or 4%

Riemst:	1 home or 4%
Tessenderlo	1 home or 4%
Bilzen	1 home or 4%
Bocholt	1 home or 4%
Heusden-Zolder	1 home or 4%
Genk	1 home or 4%
Sint-Truiden:	1 home or 4%
Other province:	1 homes or 4%

If we have a closer look at these figures and we point the homes out on a map of Limbourg, we get this result:



Figure 3 Pilots EMC as red bullets on the map of the Province of Limbourg

It is too early to conclude something significant because of the limited number of pilots for this target group.

2.2.5 EPC Labels

In Flanders, as a seller of a home, it is obliged to deliver an EPC Report to the buyer. Within the target group of Buyers we thus have a clear view on the EPC Labels of the homes. Within the target group of Existing Mortgage Clients of Onesto however, it is somewhat more difficult to have a good idea of the energy efficiency of the homes: some clients bought their house before an obligation of an EPC report even existed. Others possess an EPC report from before 2019 (from 2019 on a new type of EPC report was obliged, with much more accuracy and more qualitative information in it).

So, in our C-REAL process for the existing mortgage clients, first thing to do after the pilots have signed the privacy agreement is to check whether or not there is an EPC report and whether or not the client has conducted any renovation works since the date of the report. If there is no report or the report is outdated, we appoint an EPC reporter and we make sure we receive the report before the renovation advisor does the home visit.

In total we received 26 EPC reports (of the 27 pilots):

- Highest EPC Value: 1 057 kWh
- Lowest EPC Value: 86 kWh

LABEL A (0 – 100 kWh): 1 pilot or 4%

LABEL B (100 – 200 kWh): 6 pilots or 22% (1 apartment)

LABEL C (200 – 300 kWh): 6 pilots or 22%

LABEL D (300 – 400 kWh): 3 pilots or 11%

LABEL E (400 – 500 kWh): 3 pilots or 11%

LABEL F (500 - ... kWh): 7 pilots or 26%

LABEL UNKNOWN: 1 pilot or 4%

- Average EPC value of homes for this first project pilots: 376,31 kWh
- Average EPC value for target group of Buyers was 527,70 kWh

So, at first sight, this is good news, because existing clients manage to lower their EPC value through the years. But, once again, numbers are still too premature to speak of a well-funded correlation.

At this point in the C-REAL project, no pilots have already finished their renovation.

2.2.6 Renovation

Of course, in the C-REAL project it is all about renovating the homes towards more energy efficiency. When selecting a project pilot the goal is to make the home of this pilot more energy efficient. So we find it very useful to have a look at the (estimated) renovation costs of the selected pilots, the (estimated) number of energy efficient measures, the part of the mortgage loan for renovation, if there is an additional (energy) loan for renovation and the (potential) jump in EPC Label that comes with it. But, for the Target group of Existing Mortgage Clients we do not yet have a sufficient amount of data to conduct an interesting analysis on this.

The estimated renovation cost

Of course, it is only after the renovation is finished we will get a well-funded view on the real cost of the global renovation. We will discuss this in detail at the end of the project, but in what follows we already try to create an intermediate state so we can learn from it and try to optimize the cooperation between the renovation advisor, the customer and the lender.

First of all, let's talk about the pilots that already have a renovation plan and approved loan for conducting it. At this point in the C-REAL project no pilot already has finished his renovation, but 14 out of 27 pilots are at least at the starting point of it.

Because of the energy crisis, and of course the scarcity of materials and contractors, it often is very difficult to even find a contractor just to visit the home and to make an offer. That is why, especially for the Target group of Existing Mortgage Clients, it often takes a lot of time before being able to start the renovation works.

Let's take a look at the 27 pilots in general:

- 25 pilots already received their renovation advice report and their cost estimation
- 1 pilot stopped being part of the project after the renovation report was discussed, for this pilot the state of the house seemed too dramatic to even start any kind of renovation
- 2 pilots are on hold: 1 because of lack of additional monthly budget at this moment and 1 because of unforeseen circumstances in their private life
- 4 pilots are not going to start any renovation works, even after discussing the renovation advice and the cost estimation of the opportunities
 - 1 because of lack of budget (EPC label D, 342 kWh)
 - 1 because after discussing the renovation advice the opportunities to save some extra energy seemed not urgent (EPC label B, 182 kWh)
 - 1 because the opportunities mentioned in the report can only be conducted after admission from the ACO she is part of (EPC Label B, 121 kWh)
 - 1 because, after having discussed the renovation report and the cost estimation, she has decided to sell the house (EPC Label B, 163 kWh)
- The other 18 pilots:
 - 1 is still waiting the approval of the license to renovate
 - 6 are in the middle of their renovation works
 - 11 are waiting for concrete offers of contractors before they can start any works

If we have a close look at the figures above, at this point in the C-REAL project it is not very useful to look at the numbers of the pilots who already started their renovation works because figures are too few. But we will do a limited analysis at this point, to have a reference point for the analysis at the end of the project:

- Average estimated cost for renovation (of the pilots willing to renovate): 40 900 euro
- Average mortgage loan for renovation: 20 714 euro
- Average number of measures: 2,5
- In 3 cases they added an additional energy loan, provided by the Flemish government, to their mortgage loan
 - Average loan: 37 000 euro

2.3 Profile of the owners

2.3.1 Single or couple

In total 27 pilots were selected for the Target group of Existing Mortgage Clients. No less than 15 of these 27 (56%) pilots concern singles. That is even a bigger percentage than for the Target group of Buyers (51%). In total there are 39 persons involved in this first series of pilots.

2.3.2 Age

The average age of all pilot persons is 42,77 years. That of the singles is higher: 45,80 years. The average age of the couples, on the contrary, is significantly lower: 40,88 years.

- Average age all pilots: 42,77 years
- Average age single pilots: 45,80 years
- Average age couple pilots: 40,88 years

Let's compare this to the age of the pilots for the Target group of Buyers:

- Average age all pilots: 35,56 years
- Average age single pilots: 37,92 years
- Average age couple pilots: 35,11 years

These differences are no surprise of course, because in general, existing mortgage clients are higher in age than buyers.

2.3.3 Gender

In total, in the Target group of Existing Mortgage Clients, 39 people are involved, 25 of them are female (64%, Buyers: 53%) and 14 of them are male (36%). Singles: 13 out of 15 pilots within the group of the singles are female (87%), whereas 2 are male (13%). So, especially in the group of single pilots women are really overrepresented.

2.3.4 Status of employment

In total, of the 39 people involved as a pilot, 15 are laborers (38% of all people involved). For 4 of the couple pilots both partners are labourer (33% of couples). Furthermore, 10 people have the status of a (civil) servant (26%), 3 people are entrepreneur (8%), 9 people are disabled (23%), 1 person is unemployed (3%) and 1 person is retired (3%)

Table 1 Status of employment Target group of Existing Mortgage Clients

Labourer	15	38%
Servant	10	26%
Entrepreneur	3	8%
Disabled	9	23%
Unemployed	1	3%
Retired	1	3%

Tabel 3 Status of employment Target group of Buyers vs. Target group of Existing Mortgage Clients

Labourer	22	30%	Labourer	15	38%
Servant	37	50,6%	Servant	10	26%
Entrepreneur	6	8%	Entrepreneur	3	8%
Disabled	3	4%	Disabled	9	23%
Unemployed	2	3%	Unemployed	1	3%
Unknown	2	3%	Retired	1	3%
Retired	1	1%			

Two numbers that really catch the eye are the (civil) Servants (50,6% vs. 26%) and the people with the statute of being disabled (4% vs. 23%). The sequel of the C-REAL project will probably show more significant data on this, but it is worth mentioning it here so we can see how figures will evolve during the project.

3 Workshop Renovation Advisor, Lender and Customer

In order to be able to optimize the process, as discussed in this deliverable, we did regular meetings/workshops in which the renovation advisor, the financial advisor and even sometimes the customer could give their view on the process and the project. It is by working agile that most optimizations could take place immediately after they were signalled. We have decided to keep on working this way, also for the second wave of project pilots.

4 Conclusions

Despite the fact we do not yet have a significant number of pilots for both target groups, some interesting data were discussed in this deliverable. The learning lessons, which we stated in this deliverable helped us to optimize the methodology and the processes.

Let's not forget the end goal of the C-REAL project: installing a one-stop-shop in the Energiehuis Limburg. During the past project period we were already working hard on that goal. Every pilot brings us one step closer to that end goal. They help us better understand the thresholds, the opportunities and what we really need to trigger as much home owners as possible into deep renovations.