

Go big or go home:

An inductive study on the decision process of making residential houses more energy efficient among Private Banking clients of Van Lanschot

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Abstract

The Dutch government has stated the ambition to reduce greenhouse gas emissions by 49% in 2030, and 95% by 2050 compared to the emissions as they were in 1990. Within the EU, it is estimated that 75-90% of the current housing stock will still be standing in 2050. This means that housing renovations will be one of the foremost accelerators of this emission reduction targets. In current literature, it is evident that for both mortgagee and borrower there are benefits. However, inductive research towards *why* homeowners are motivated or impeded to make their home more energy efficient is still lacking. Especially for rather specific target groups, such as Private Banking clients. The objective of this research is to identify what drives and hinders the Dutch private banking client in making their home more energy efficient. Therefore, the following research question has been formulated:

“What motivates and hinders the Dutch private banking client towards making their home more energy efficient?”

In order to answer this research question, the data was collected by with semi-structured interviews with 12 clients of Private Bank Van Lanschot. In order to act upon the acquired data, and interpret it properly, the Gioia method was used. This research has shown private banking clients' motives for renovating their home is partly because of their awareness that they have a privileged position and want to contribute accordingly. On the other hand, they want to live in comfort and not worry about financial matter. The Private Banking clients were most impeded by the effort it takes to find the correct parties, such as contractors, advisors and architects. Finally, when private banking clients choose to renovate their home, they go about it diligently and properly; ‘Go big, or go home’.

Keywords: Private Banking, green mortgages, energy efficient mortgages (EEM), energy improvement mortgages (EIM), sustainability, renovations

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1. Research framework

1.1 Introduction, situation and complication

The importance of residential energy usage, and its energy efficiency, has become painfully evident in the recent period. The Dutch central bureau for statistics (CBS) has calculated that in 2022, the average household's energy bill will be 86% higher than previous years due to significantly higher delivery costs of energy. Especially those in relatively old, and in particular those in old large residential houses will pay higher bills, up to 95.7% higher than in 2021 for the aforementioned category (CBS, 2022). Typically, the target group, Dutch private banking clients, fall in the latter category.

Climate change, Corporate Social Responsibility (CSR) and sustainability are currently one of the hottest topics in the financial service industry and in politics around the world. The Dutch government has stated the ambition to reduce greenhouse gas emissions by 49% in 2030, and 95% by 2050 compared to the emissions as they were in 1990 (Government of the Netherlands, 2022). A significant portion of this net-zero transition is to be achieved through financial institutions, by so called 'sustainable finance', or 'green finance': sustainable investment opportunities financed by financial services. To put it in other words: "There is no road to a net-zero economy without financial services" (Sutcliffe, Lofts, & Watson, 2021). 'Brown' only converts to 'green' with investments from financial services. In terms of greenhouse gas emissions, residential housing is the second highest category in the Netherlands (19%). Residential housing emits more greenhouse gasses than Public transport, commercial aviation and transport with cars combined (18%), see Appendix A (Milieu Centraal, 2021).

One of the prerequisites to reduce the greenhouse gasses of residential buildings, is to make the residential buildings more Energy Efficient (EE). In the EU, it is estimated that 75-90% of the current building stock will still be standing by 2050 (European Covered Bond Council, 2022). Therefore, when attempting to realize net-zero by 2050, home improvements and its relatively large proportion of the total emissions will be one of the foremost accelerators in reducing the greenhouse gas emissions. The process of making a building more energy efficient is interesting for both the borrower (homeowner) and for the mortgagee (lender). From the point of view of the borrower, aside from the obvious energy-cost savings, it has been shown that there is a significant and positive relationship between Energy Efficiency and sale prices of houses (Billio et al., 2021).

From the mortgagee's point of view, Billio et al. (2021) find that the default rates of green mortgages are significantly lower than for so called 'brown' mortgages: an advantage for both the lender as the mortgagee. This development resulted in a relatively new commercial proposition: the green mortgage for residential properties. The first green mortgages emerged around 2017 in The Netherlands. Borrowers can apply for this type of mortgage if they achieve a pre-determined "Energie Prestatie Coefficient", or EPC. Typically, the borrower receives a discount on their interest payments, up to a limited amount of the total mortgage, for a limited period of time (Van Lanschot (a), 2022). The phenomenon of acquiring a discount on a mortgage in exchange for a more energy efficient home, is understood as a 'green mortgage'. However, it has several synonyms such as 'Sustainable mortgage' or 'Energy Efficient mortgage' (Bertoldi et al., 2018; Dell'Anna et al., 2022). In this research, the term 'green mortgage' will be used, as it is most commonly called in Dutch literature and banks.

This is where the role of the bank is essential. A bank, or any mortgagee, could therefore reduce greenhouse gas emissions by providing attractive financing: the green mortgage. The benefits of green mortgages are evident (Billio et al. 2021). However, to my current knowledge, there has been little academic research towards green mortgages and the different drivers as to why a residential house owner would, or would not, invest in making their house more energy efficient, and therefore engage in a green mortgage. Mortgages however are a rather well-researched topic. The majority of this research has been conducted in the United States' residential mortgage market. Given the relatively recent emergence of the green mortgage in both the Netherlands and the European Union, little academic research has been conducted to date towards this topic. In combination with this rather ambiguous and not well-known target group, the Private Banking client, this research contributes to the existing literature.

The majority of the literature, which was found during for this research, was based on quantitative research. Both residential and commercial green mortgages have been researched in terms of default rates, characteristics, drawbacks and advantages. Also, the role of energy efficient buildings on loans and valuations have been researched. However, previously conducted research was focussed on the product, rather than on the behavioural aspects.

1.2 Research objective and contribution

The objective of this research is to identify what drives and hinders the Dutch private banking client in making their home more energy efficient. The sample and focus of this research are exclusively on private banking clients of Van Lanschot. Up until now, a reverse methodology has been used: researchers looked from a mortgagee's (lender's) perspective,

opposed to a borrowers (client) perspective. Previous research begun with the historical mortgage data, and then looked at the several characteristics.

That is where I believe there is a research gap in the current research. The combination of the perspective and the specific sample is something that has not been researched to date, to the best of my knowledge. I would like to research this topic from a client's point of view. Moreover, the focus in previous research lied on the implications and consequences of a green mortgage, not the behavioural aspects that are perhaps indeed more important to gain a profound understanding of how Private Banking clients perceive this topic.

1.2.1 Theoretical contribution

With this study, a theoretical academical contribution will be made to the fields of both social sciences as well as the field of green finance. It contributes to the field of social sciences as to understand why people make certain decisions, depending on their personal circumstances. It contributes to the field of green finance, as green mortgages are a part of green finance. Green finance is an emergent field, with still a lot of ambiguity regarding regulation and procedures. This study aims to unveil the drivers of consumers to engage in the home improvements and eventually a green mortgage. More importantly, by using a qualitative approach, the study aims to inductively shape a new theory to gain a better understanding of this particular segment.

1.2.2 Practical contribution

From a practical perspective, this study will provide issuers of green finance, and in particular green mortgages, a more complete and comprehensive impression of the market. The results of the study may be used to engage with a specific target group, who would currently not be sure whether to engage or not in a green mortgage and thus eliminate bottlenecks. Additionally, the result may be used in a marketing campaign or could be talking points with potential green mortgage borrowers. Additionally, Van Lanschot has not yet conducted market research for this topic among their clients. Therefore, the practical contribution of this study is rather valuable in illustrating what motivates and hinders the private banking client in the process of investing in a more energy efficient house. The mortgage portfolio of Van Lanschot currently consists predominantly out of old, and energy inefficient houses. In the figure below, the mortgage portfolio and the details of those houses can be seen. The older the house in the portfolio, the worse the energy efficiency rating. Therefore, the problem is evident. Van Lanschot's mortgage portfolio lends itself excellently to be a subject of this research, as there are many old and energy inefficient houses within the portfolio. It can also be seen that if the

older the building, the poorer the energy label, and thus the energy efficiency (Van Lanschot Kempen, 2022).

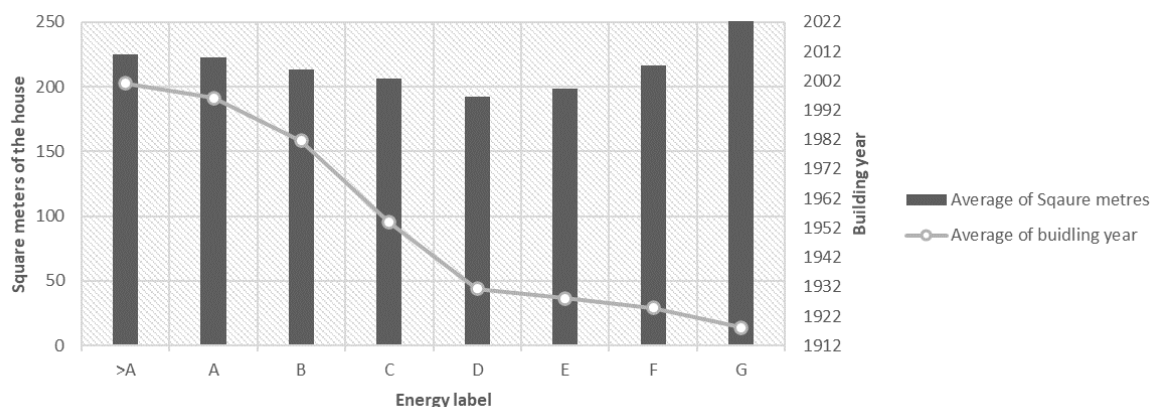


Figure 1 The current Energy-label data of mortgages at Van Lanschot (Van Lanschot Kempen, 2022)

1.3 Research question

In this research, there are two research objectives. Namely, both the motivations and barriers towards making sustainable investments will be researched. These are captured in the same research question. The emphasis of the research, however, lies on the barriers as they are estimated to be the most relevant and valuable, and therefore a greater contribution can be made to the existing academic literature. The research question is formulated as follows:

What motivates and hinders the Dutch private banking client towards making their home more energy efficient?

2. Theoretical Framework

2.1 Theories

2.1.1 Sustainable Finance and Green Finance

Frequently, the terms ‘sustainable finance’ and ‘green finance’ are used interchangeably, although these are indeed different topics. The European parliament makes a clear distinction between the two terms. Green finance is utilized to fund projects that make a significant contribution to the climate and environmental issues. Sustainable finance is more specific, as it also extends its domain to Environmental, Social and Governmental (ESG) issues, with the overarching goal of creating long-term value in sustainable economic activities and projects. Therefore, Sustainable finance falls under the umbrella of green finance. (European Parliament, 2021).

There is still some ambiguity surrounding the somewhat unregulated area of green finance. Therefore, countries within the G20, the 20 largest economies in the world, have established a study group to “identify institutional and market barriers to green finance and options to enhance the mobilisation of private capital for green investment” (G20 Sustainable Finance Working Group, 2022). In 2016, their first publications about green finance saw the light. In this report, the group published universally recognized definitions for green finance. The group defines green finance as the following: “Financing of investments that provide environmental benefits in the broader context of environmentally sustainable development. [...] Beyond the financing of green investments, green finance also involves efforts to internalize environmental externalities and adjust risk perceptions in order to boost environmentally friendly investments and reduce environmentally harmful ones [...]” (G20 Green Finance Working Group, 2016, p. 5). For this research, the term ‘green finance’ will be used, as it will be more appropriate in the context of mortgages opposed to sustainable finance.

Although green finance is a relatively new area of finance, the development has significantly grown in recent years. Especially green mortgages, falling under the umbrella of green debt, has grown. In 2019, the issuance for sustainable debt reached an all-time high of almost half a trillion dollars (BloombergNEF, 2020). The total development of green debt can be seen in Figure 1 below. (Green) Mortgages can be allocated to the category of green loans.

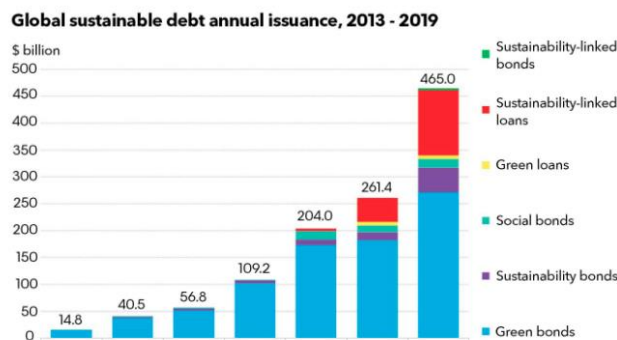


Figure 2 Development of 'Green Finance', 2013-2019

2.1.2 Going green

As stated in the research framework, little research has been conducted towards green behavioural aspects. The first study to research the individual preferences regarding social well-being, financial well-being and the environment in the Netherlands was conducted in 2014 (De Silva & Pownall, 2016). These are the three most important elements when considering individual motivations for green behaviour, based on the following rationale: If merely environmental and social dimensions were to be considered, the development in financial capital would be neglected. Similarly, if exclusively financial and social dimensions were to be considered, the natural capital to sustained financial well-being would be neglected. Finally, if only financial and environmental aspects were to be considered, neglecting social well-being, there would be increasing income disparity and rising unemployment (Stevens, 2010).

The research by De Silva & Pownall (2016) provides some interesting, albeit perhaps obvious findings. In their study, the authors differentiate between financial, social and environmental well-being as has been described in the previous paragraph. Firstly, and foremostly, the authors find that females play a significant and positive role in reducing carbon emissions, rather than males. Similarly, college graduates place more value on social well-being and reducing carbon emissions, compared to non-college graduates. The group with the largest positive role is college-educated females. Perhaps most interesting in the study is that income is insignificant in all scenario's regarding environmental well-being factors. Homeowners with a relatively large amount of debt on their residential property, those with a relatively large mortgage, are not concerned for social well-being and reducing greenhouse gasses; they are most concerned with financial well-being compared to people with smaller mortgages. Moreover, age is a significant and positive factor for social well-being, meaning the older the respondent, the more concerned about reducing greenhouse gasses, and less concerned with financial well-being.

The basis of this theory and literature lies with rather antiquated research. Borden and Francis (1978), and later Lehmann (1999) have hypothesized two fundamental theories which have been confirmed throughout the years: individuals with a self-centred and competitive orientation are less likely to act towards environmental well-being. The second hypothesis states that people who have appeased their personal needs, are more likely to act towards environmental well-being as they have more means (money, energy and time) to care about environmental well-being and other less personal, social affairs. In the context of the latter hypothesis, those who fit the persona are most likely elderly with more savings and, for example, have paid off their mortgage. This is in line with the research by De Silva & Pownall (2016), as described in the previous paragraph. Individuals with relatively small amount of debt, and a relatively higher amount of investable wealth, are financially viable and have enough time, thus act more towards environmental well-being. Especially in the context of Private Banking clients, this is an interesting hypothesis. Private banking client have often appeased their personal needs, but are indeed competitive, as they were often entrepreneurs or business professionals.

Age, however, is an interesting variable where the literature does not seem to reach a consensus. In the aforementioned research, the authors found a positive relationship between age and environmental well-being. However, some nuance is due; in a meta-analysis towards the relationship between age and environmental sustainability, ranging from 2000 until 2012, Wiernik, Ones & Dilchert (2014) found no significant relationship at all; the insignificant relationships however, leaned towards a positive relationship between age and environmental sustainability.

A particular interesting age group are 'Millennials'. Although there is no exact definition, and the literature does not reach a consensus, the general guideline is that millennials are individuals born between 1982 and 2000, give or take a few years (Klein, 2018). Most studies find that millennials are indeed more concerned with environmental well-being, contradicting the aforementioned studies that age and environment are positively related. The motivation for millennials, however, differs. Some studies refute the generalization that millennials are genuinely concerned with the environment; they suggest that millennials are more attitudinally green, rather than behaviourally green. This distinction between 'behaviour' and 'attitude' is confirmed by other research as well (Naderi & Steenburg, 2018; Bernardes et al., 2019; Da Silva & Pownall, 2018). The majority of millennials have a positive attitude towards sustainability, but this is seldomly reflected in their behaviour. One distinctive factor is the

financial situation. Although the millennials want to be green, they often cannot afford to be it (Bernardes et al., 2019). The authors noted that “the extra financial effort that is inherent in buying sustainable products doesn’t justify the personal benefits of being “green” (Bernardes et al., 2019, p. 5). This confirms the conclusion that Da Silva & Pownall (2018) made: when there are increased financial consequences, individuals will more likely be less environmentally aware.

2.1.3 Barriers towards ‘going green’

The phenomenon of the ‘gap’ between intentions and behaviour is well-documented and finds its origin in the research field of environmental psychology. Environmental Psychology looks at the complex interactions between humans and their environment. The central question within this field of research is the following: ‘Why do people act environmentally and what are the barriers to pro-environmental behaviour?’ (Kolmuss & Agyeman, 2002). The hypotheses by Borden & Francis (1978) and Lehmann (1999) described in chapter 2.1.2 also originate within the field of environmental psychology. Kolmuss & Agyeman (2002) attempt to find an answer to this question by describing the most influential frameworks which were used in the field. Although as many as hundreds of studies have been conducted in the field of environmental psychology, there has not been found one definitive explanation. The initial research assumption in the 1970’s was that through amassing more (environmental) knowledge, the attitude of an individual would change, and therefore will become more environmentally aware. However, more recent research has rejected this theory. In most cases, an increase in knowledge and awareness does not lead to pro-environmental behaviour (Ferreira, Marues, & Nogueira, 2019).

Towards the idea of making homes more Energy Efficient, the European Mortgage Federation – European Covered Bond Council, (EMF-ECBC), have been working on the ‘Energy Efficient Mortgage Initiative’. Considering that EU’s mortgage market comprises 56% of EU’s GDP, and given the fact that 75-90% of the EU housing stock will still stand by 2050, there is an enormous opportunity and urgency for renovating homes to be more Energy Efficient, in order to achieve net-zero by 2050. However, the renovation rate in the EU lies at 1% per annum. This phenomenon is called the “*Energy efficiency gap*” (EMF-ECBC, 2021). The EMF-ECBC has identified six foremost barriers which prevents energy efficient home renovation. These are based on case studies and other literature review research. These barriers are:

1) Behavioural barriers. Many households are not aware of the potential benefits of making the house more energy efficient. Moreover, there is often a lot of confusion regarding the decision-making process towards energy renovations. Within this barrier, there are four areas identified where customers experience high uncertainty: Cost effectiveness (what will the return on investment (ROI) be?), heavy discounting of future earnings: the costs currently made weigh heavier than the benefits of cost saving in the future. Increase in building value: although it is clear that energy efficient renovations increase the buildings value, it is uncertain by how much. Environmental impact: customers perceive uncertainty surrounding the actual environmental impact of their renovations, which is indeed difficult to measure. **2) Transaction costs.** In particular, this barrier concerns the time spent from the consumer towards all the different partners to work with. Examples are finding the correct renovation options, the company, approvals, acquiring a green loan/mortgage and monitoring the renovation process. **3) Financial barriers.** Acquiring competitive financing might not always be possible. Often, the renovated house cannot be used as collateral. In that case, an unsecured consumer loan is the only option, resulting in a costly endeavour. **4) Data insufficiency.** Often, there is a lot of ambiguity towards which building renovations would indeed be profitable. **5) Regulatory barriers.** The process of acquiring the legal documentation, such as an energy label, after the renovations can be worrisome. **6) Conflicting interests between landlord and tenant.** Landlords often have less incentive to start a renovating project. Often, although there is a high investment of the landlord, resulting in a higher energy efficient for the tenants. However, the landlord may not always be able to increase the rental payments.

2.1.4 Green Mortgages & Banking

The term 'green mortgage' deserves some more attention, as it is subject to ambiguity. In the literature, a distinction is made between the Energy Efficient Mortgages (EEM) and Energy Improvement Mortgages (EIM). The difference between the two mortgages is that the EEM is intended for already energy-efficient buildings or those that have been energy retrofitted. The EIM is intended for existing buildings that will undergo energy improvements (Dell'Anna et al., 2022; European Mortgage Federation, 2019). Both forms of Energy-related mortgages fall under the same umbrella, which will be used in this research: 'green mortgage'. That term is commonly used in Dutch literature and in practise, at banks. Additionally, the product known in the Netherlands at this time is literally translated to 'green mortgage'. In this product, no distinction is made between whether the collateral of the mortgage is already energy efficient, or whether energy efficiency improvements are yet to be made. Ordinarily however, the 'green mortgage' in its current form is meant for Energy improvements.

Green mortgages, both for residential as for commercial properties, has been researched extensively in the past years. The COVID-19 pandemic has acted as an accelerator for green finance. During the COVID-19 period, many investments have shown to be prone to influences such as politics and, indeed, pandemics. During this period, green finance (including green mortgages) has shown to provide safe and effective returns and it has the ability to protect a portfolio from climate risks, which are predicted to occur more often. (Streimikiene & Kaftan, 2021). This principle holds for both the individual who invests the proceeds of the green mortgage in their house, but perhaps more so even for the mortgagee (lender). As stated in chapter 1.1, Financial institutions play a critical role in the transition to net-zero by 2050. Inevitably, a public-private cooperation is peremptory in order to achieve these goals. This cooperation has led to a strong debate; what should the role of banks be in this shift to net-zero? One perspective confirms the role of banks in this situation, given the essential role of financing the transition and the capital flows through these finances, supporting innovative technologies and its investments. An opposing perspective is focussed on the time horizon of banks. There would be a mismatch between the relatively short to medium horizon of the bank, opposed to the significant longer horizon of sustainable developments. This situation could lead to financial stability problems and requires a vastly different approach to both investments and risk frameworks (Borghese, 2019).

Nevertheless, there are proven advantages in providing the green mortgage for both residential and commercial real estate. In recent years, research towards green mortgages for both residential and commercial properties have been conducted. During this research, only residential green mortgages will be considered. As well as in the Netherlands and abroad, for example in Italy, research has shown that default rates are significantly lower for green mortgages opposed to so called 'brown mortgages'. All research towards these green mortgages and default rate is conclusive: green mortgages are beneficial from a mortgagee's point of view, as well as for the borrowers point of view (Borghese, 2019; Billio et al., 2021).

Research conducted towards the Italian residential green mortgage market, showed that nation-wide there is a negative significant relationship between probability of default and energy efficiency. This confirms that Energy Efficient (EE) residential real estate, indeed has a lower default on the mortgage than real estate which is not energy efficient (Borghese, 2019). Billio et al., (2021) conducted research towards energy efficient mortgages in the Netherlands and confirmed the findings of Borghese (2019). Billio et al. (2021) included the role of household income related variables and allocates the different income groups of the sample in

terciles. For the lowest and middle income terciles, the default rate is significantly lower for EE homes than its non-EE counterparts. For the highest income tercile, the defaults are also significantly lower, however only when controlling for market variables. Moreover, the authors find that especially in the lowest income tercile, the savings coming from reduced costs (i.e., decreased energy bills and home insurance) have a greater impact on the default rate relative to the other income tercile. This would indeed make sense, as the highest tercile would be less impacted by savings from a more energy efficient house. For this research, the outcome of the highest tercile is most interesting, as that is where the Private Banking clients are. In conclusion, the highest tercile income has the least significant benefits compared to other groups, but nevertheless significant.

This, however, is not the only advantage from a mortgagee's perspective. Research by Tiwari (2021) shows that in the banking industry, the 'green' word of mouth is rather important when considering a green brand image of a bank, something a green mortgage might achieve. Tiwari (2021) shows that when a bank puts a lot of emphasis on maintaining a green brand image, it will lead improved customer satisfaction. Furthermore, the study showed that 'green brand image' has a direct and positively significant impact on 'green word of mouth'. 'Green word of mouth' is defined as that the client would strongly recommend the product/service to others. Therefore, green finance is significantly and positively related to customer loyalty, satisfaction and ultimately (positive) word of mouth. From a mortgagee's perspective, notably for a Private Bank, this is of particular interest.

2.2 Hypothesis development

Given the qualitative nature of this research, namely it being inductive, no hypotheses will be formulated at the beginning of this research. After all, "because the method involves developing hypotheses *after* the data are collected, it is called hypothesis-generating research rather than hypothesis-testing research" (Auberach & Silverstein, 2003).

3. Research Design

3.1 Method of data collection

Generally speaking, research may be conducted in either a qualitative or a quantitative manner, or inductive or deductive research respectfully. For this research, a qualitative research method will be used, namely interviews with clients of the bank. The rationale for this approach is because of the very nature and objective of the research: gaining a thorough understanding of the motivations and barriers of a rather specific target group, towards no real research has been conducted at the time of writing. The time of writing and the data was attained in the timeframe of July and August 2022.

The method with which the data is extracted through the interviews, is done with the help of the book “Business research methods” (Bryman & Bell, 2011). In order to emphasize subjectivity and involve people’s emotions, semi-structured interviews with open ended questions will be used. This approach is considered both valuable and reliable (Bryman & Bell, 2011). The method of data collection is also inherently linked to the method of analysis that will be used: the Gioia method. The method of analysis which has been used will be further elaborated on in chapter 3.4. The interview will be conducted by a semi-structured format. This format has been formulated in collaboration with experts of Van Lanschot and using the literature from Gioia et al. (2012). The starting format of the interview may be found in Appendix C. However, as Gioia et al. (2012) dictates, inductive and interpretative research requires *flexibility*. The interview questions *must* change as the interviews and the research advances. A quote that is striking is the following: “Adhering to some misguided sense that the protocol must be standardized so that there is consistency over the course of the project is one of the reasons why traditional research sometimes is not very good at uncovering new concepts to develop” (Gioia, Corley, & Hamilton, 2012, p. 16). Therefore, *flexibility* is prescribed.

The potential participants have been approached by e-mail. In order to ensure and safeguard the reliability and validity, the e-mail with the invitation to the interview has been sent through a private banker to his or her clients. The banker is free to choose any client he or she thinks is appropriate. The process was as follows: the interview will be formulated, approved by the supervisor from the University of Twente. Then, client segments were chosen to participate in the interview. Those segments’ private banker will be sent the format, and in its turn he or she can invite their clients to participate in the research. Using the private banker as ‘middleman’ ensures a more personal touch by the bank and will eventually lead to a higher engagement opposed to sending the invitation directly to clients. Additionally, clients may ask their

questions or contact their banker accordingly. This decentralized approach ensures that the chosen clients may optimally engage in the interview.

The validity is ensured through the fact several different client segments are selected, and their personal relationship with their private banker. This approach to reliability and validity will ensure an as valid and reliable as possible participation of the interviewees. In order to enhance the reliability, the so called “Laddering technique” will be used. This technique has the *why* question as its basis. The laddering technique is particularly useful in eliciting the emotional values, concepts and determining the links between the emerging concepts (Breakwell, 2004). As the purpose of this research is to conceptualize sustainable investments and discover *why* and *what* motivates or hinders them to invest in a more energy efficient home.

Using the qualitative approach to the research, definitely has its merits. However, it is important to state that the qualitative approach is also limited. Namely, the findings from the research cannot be generalized due to the absence of empirical, statistical back-up through quantitative research. Therefore, the conclusions and implications based on the findings have to be handled carefully and with consideration.

The data will be handled according to GDPR regulation and the Code of Conduct for the use of personal data in Scientific Research by VSNU (the Association of Universities in the Netherlands). Additionally, the research and research methodology have been approved by the Ethics commissions of the Faculty of Behavioural, Management and Social Sciences (BMS) at the University of Twente, request number 220601.

3.2 Selection, Sample and Assumptions

The population of this research includes clients of several different segments within the Private Bank of Van Lanschot. In order to be eligible to become a client at Van Lanschot, an individual requires to have €500.000 of investable wealth. This is to say, the client is expected to invest at least half a million through the bank. (Van Lanschot (b), 2022). However, the bank also has different services for people for whom it is anticipated to reach this amount of investable wealth in the foreseeable future. Some examples are entrepreneurs with promising ventures, partners of renowned law-, consultancy- or private equity firms or young doctors. For this research, the following groups are included (Van Lanschot (b), 2022):

- Healthcare clients; such as (future) pharmacists, veterinarians, surgeons, dentists and other medical specialists;
- Business Professionals; partners of renowned law-, consultancy- or private equity firms;

- Van Lanschot – regions; individuals with more than €500.000 investable wealth, without a particular background. Van Lanschot Regions is divided in four regions:
 - o North-East (Groningen, Friesland, Overijssel, Drenthe);
 - o South (Zeeland, Brabant and Limburg);
 - o Middle (Utrecht/North-Holland), and;
 - o West (North-Holland, South-Holland).

The rationale behind including these different client segments is twofold. Firstly, and foremostly, the research potential significantly differences towards their motivations and barriers for making their home more energy efficient. As may be imagined, these various client groups have different needs and characteristics. It is expected to enrich the results of this research by including a diverse group of participants. The second reason for including the different client segments, is to make the research both academically and practically more relevant. The participants in the interviews are selected without any prior knowledge of the researcher.

Not alike quantitative research, that concerns itself chiefly with statistical interpretations, using a strictly logical and objective paradigm, qualitative research concerns “nonnumerical information and their phenomenological interpretation. This is inextricably tie in with human senses and subjectivity” (Leung, 2015). Similar to conducting quantitative research, where certain assumptions need to be met, this is also the case for the qualitative approach and the particular method of data analysis: the Gioia method (Gioia, Corley, & Hamilton, 2012). Gioia et al. (2012) prescribes assumptions focussed on the sample when deploying the Gioia method. Firstly, a more abstract assumption. Namely that the organizational world is socially constructed. Gioia et al. (2012) also states a more practicable assumption, namely that the participants are “knowledgeable agents”. This entails that the participants know what they are attempting to do, and can expound their actions, intentions and thoughts. Therefore, a mere layman would be inappropriate to interview. The sample therefore only contains clients who are familiar with energy efficiency in their home. Moreover, one important sidenote related to the sample. Gioia et al. (2012) prescribed that ‘confidentiality’ cannot be promised to the interviewees. Instead, ‘Anonymity’ can be offered. If the researcher would choose to provide confidentiality, most of the possibilities reporting would be precluded, which is not desirable for qualitative research. The following criteria were taken into account when the sampling process commenced:

- Being a wealthy individual, with at least €500.000 investable wealth, or to achieve this in the near future;
- Being a “knowledgeable agent”: the client has to have personal experience in making their home more energy efficient;
- No more than two clients per client segment, in order to avoid over-representation;
- No distinction is made between investable wealth surpassing €500.000;
- No distinction is made between gender of the participants;
- No distinction is made between age of the participants;
- No distinction is made between specific backgrounds other than the client segments;

3.3 Interview structure

The interview is constructed together with professionals of Van Lanschot and approved by the University of Twente. The philosophy throughout the survey is: “First the sweet, then the sour”. This means as much as that firstly, the motivations and benefits of the renovations and green investments will be discussed or talked about. Consequently, the barriers (or ‘sour’) will be discussed. The basis for the interviews with the clients is the theories which are explained in chapter 2. This primarily concerns ‘going green’, or what motives the client, and the barriers towards going green. The interview guide can be found in Appendix C.

3.4 Data analysis

The Gioia method was first described in the works of Gioia and Chittipeddi (1991). Since then, the method has been elaborated on and refined in several studies. The Gioia method “applies systematic conceptual and analytical discipline that leads to credible interpretations of data, and also helps to convince readers that the conclusions are plausible and defensible” (Gioia, Corley, & Hamilton, 2012, p. 15). The major drawback with using other methods of qualitative data collection, is that it lacks both the capacity to capture the experience of people living that experience, and adequate level of scientific theorizing regarding that experience. The Gioia method accomplishes both aims. It is a “*systematic inductive approach to concept development*” (Gioia, Corley, & Hamilton, 2012, p. 16). The analyses will be conducted by performing the initial data coding, unveiling 1st – order codes. This coding is done by one person, namely the researcher. Gioia et al. (2012) does describe that there should be two researchers, however that is an accepted limitation in this study. Objectivity is secured as it is inherently to the Gioia method. The method of analysis can be traced back to every quote and every interview. Therefore, the highest possible degree of objectivity, given the limitations, is obtained. The coding is done by going back and forth between the transcript of the interviews

and the existing coding list, manually. These codes are derived directly from the transcripts of the interviews and are therefore “informant centric” terms. The 1st-order codes are distilled into 2nd order codes. These 2nd order codes are “theory-centric” codes, no longer directly derived from the transcripts, but formulated by the researcher. Finally, the second-order codes are aggregated into the more abstract level, the so called “aggregate dimensions” (Gioia, Corley, & Hamilton, 2012).

4. Results & data analysis

The purpose of this chapter is to present the findings which arose from the Gioia analysis, in an objective and non-interpretive manner. The conclusions and interpretations from the research will be made in chapter 5. In this chapter, an oversight and background information of the interviewees will be provided. After that, the interviews will be described individually, and the most characteristic and important findings are distilled. Consequently, the second-order codes and corresponding first-order quotes will be presented. The direct quotes and an oversight of the Gioia analysis can be found in Appendix D.

4.1 Empirical results

This chapter presents the empirical findings in a non-interpretative way to assure objectivity. This chapter comprises of 12 interviews with 12 different Private Banking clients, from several client segments. Throughout the summaries of the interviews, mutual findings and differences across the several interviews have been linked where possible. These corresponding links will later be reassigned into codes, by performing the Gioia analysis in chapter 4.4.

On the next page, a table with the characteristics of the interviewees can be seen.

	<i>Interviewee</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>Character</i>							
<i>Gender</i>		Male	Male	Male	Male	Female	Male
<i>Age</i>		49	50	52	62	62	54
<i>Education level</i>		WO - Master	N/A	HBO	WO - Master	WO - Master	WO - Master
<i>Region</i>		Amsterdam	Heerenveen	Groningen	Eindhoven	Amsterdam	Amersfoort
<i>Client segment*</i>		Business	Van Lanschot	Van Lanschot	PB Regions – south	Business	PB Regions – North-East
		Professionals	Entrepreneurs	Entrepreneurs		Professionals	
<i>Rural/urban**</i>		Urban	Rural	Urban	Urban	Semi-Urban	Rural
<i>New/existing house***</i>		Existing	Existing	Existing	New	Existing	Existing

	<i>Interviewee</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>
<i>Character</i>							
<i>Gender</i>		Male	Female	Male	Male & Female	Male	Male
<i>Age</i>		32	42	34	83 & 69	44	61
<i>Education level</i>		WO – Master	WO - Master	WO - Master	WO - Master	HBO	WO - Master
<i>Region</i>		Amsterdam	Breda	Amsterdam	Enschede	Eindhoven	Amsterdam
<i>Client segment*</i>		Healthcare	Healthcare	PB Regions – West	PB Regions - Middle	PB regions – South	PB Regions - Middle
<i>Rural/urban**</i>		Urban	Semi-Urban	Urban	Rural	Rural	Urban
<i>New/existing house***</i>		New	New	Existing	Existing	Existing house	New

* Client segment within Van Lanschot

** whether the interviewee lives in a relative urban or rural area

*** Whether the client has remodeled/renovated their existing house, or has bought a new-build house

Table 1 Characteristics of the interviewees

4.1.1 Interview 1

This very first participant was a highly educated individual, currently a partner at a consultancy firm. Before joining the consultancy firm, the interviewee worked at an American investment bank. For his profession, he is involved in sustainable finance. Therefore, he was rather familiar with the subject and receptive to talking about the topic. The interviewee lives in an urban area in Amsterdam. In terms of sustainability, the interviewee chose to invest in the existing house, and making that more sustainable.

The interviewee had a very positive stance opposed to making houses more energy efficient. The interviewee pointed out that he lives in an urban area where the square metres are scarce. In terms of making the home more energy efficient, the possibilities are rather limited. Nevertheless, the interviewee has done almost everything he could think of in order to make the home more energy efficient. When asking about his motives, the first answer was:

“I think we all need to make contributions to improving the quality of life for our children and our children's children and beyond” (interviewee 1).

The most important motive for him was indeed to create a better living climate for his direct environment, and next generations. Consequently, when asking more about his motives to invest in a more energy efficient house, he also stated:

“I am sacredly convinced of the fact that if we do not do it, it will not happen. With ‘we’, I mean the western world. [...] In that respect, we have quite a bit of progressive insight. The emerging markets and countries can benefit from the activities and the things we do. If we invest in new technology and take those steps, India or poorer countries in Africa can skip those steps in development” (interviewee 1).

Besides the more idealistic motives, the interviewee also stated a more personal motive, but that one came last in the interview.

“I think saving costs though, because if you look at the energy costs, I think it is clear to everyone that you have to do something now [...] It is not about me increasing the value of the house. It is not. It is now pure living pleasure, comfort and living in it” (interviewee 1).

The interviewee also experienced barriers in the process of making the home more energy efficient:

“That I know how achieve the energy label and get an energy label as an A or a B label [...] what those steps what those activities are what the costs are. In addition, it is also important

that I can find someone who can fix it who is reliable, without it having much effect on me.” (interviewee 1).

More specifically, the subsidies which can be given to you by the local government, were troublesome for the interviewee:

“I know there are all these subsidies, but those are hard to find and then the subsidy pot is empty again. And yes, you know, it is kind of a patchwork of subsidies, so you do not know exactly what is available there” (interviewee 1).

4.1.2 Interview 2

This interviewee is well educated, and currently owns a venture related to healthcare. He also works there himself. His wealth originates from a commercial real-estate portfolio. The interviewee lives in a rural area, in Friesland. There he currently has an old farm which he entirely renovated and invested in making the home entirely energy efficient.

The interviewee had a very positive stance regarding sustainability and investing in making the home more energy efficient. He strongly experienced the moral duty or obligation to contribute to the energy transition and make a positive contribution to the environment:

“I am a bit disappointed by the discussion that it is all a calculation for return on investment. Perhaps that is the difference between the average Dutchman and the Dutchman who works twice as hard, so to speak. [...] You know, it is all about the money, whereas in the end the goal is to contribute to the environmental well-being. [...] My biggest annoyance is at parties, about the ‘cost recovery period’. My God...” (Interviewee 2).

Furthermore, as to ‘why’ the interviewee was so passionate about the energy transition, it came down to investing in new technologies and making the world a better place for his children:

“getting a financial return is not relevant [...] just let my generation pick up the bill, That's fine, my generation has plenty of money. Because we easily spent €10,000 to €15,000 for a holiday in Portugal, but for a few solar panels we are going to calculate every penny and the cost recovery period” (Interviewee 2).

As a barrier, this interviewee also stated the subsidies were rather troublesome. So troublesome indeed, he decided to finance everything himself instead of looking for subsidies. However, the barrier was not of a significant magnitude which hindered him from investing:

“That is one thing I find a barrier. If you have to investigate into what subsidies you get and things like that. If you have to do that as a private individual, that is not doable. at least. I have no patience for that, let me put it this way” (Interviewee 2).

Furthermore, the interviewee stated that he obviously put some time into contemplating where to begin with making the home more energy efficient. However, his conclusion was that it makes no sense to do it incrementally, or bit by bit:

“Only solar panels do not make a difference, but the whole in combination with a hybrid heat pump, isolation, and energy storage indeed make a difference. so, if you are going to make it more sustainable, it has to be a combination of everything” (Interviewee 2).

As a final remark, he stated that he outsourced everything in terms of installation, purchasing and planning. He appreciated that there was a contractor who did everything for him. If that were not the case, he would not have invested in making his home more energy efficient.

4.1.3 Interview 3

This interviewee is well educated, and his wealth originates by selling his ventures and currently has some new ventures. He lives in the city centre of Groningen, a very urban area. The interviewee lives in an old residence which has not yet been completely renovated, as he states it is too difficult to do so, due to a lack of space. The interviewee indeed does have the desire to be more energy efficient. He had an expert to look at his building. He installed floor-isolation and found space to install 8 solar panels:

“Well, making my home more sustainable, that is what I would like to do, but I think it is very difficult. [...] what I could do, That's glassware and floor-insulation, but then it stops huh? I have no possibility of heat pump, no possibility of many solar panels [...]. I cannot do anymore, I want to, But I cannot” (Interviewee 3).

However, the interviewee also stated that he is not very concerned with making his house more energy efficient:

“I am a bit of a bon-vivant. I do not really want to achieve a certain goal with our house to get somewhere. I mean, I think they are really going a bit over the top with sustainability now. For me, comfort and quality of life is most important” (interviewee 3).

When asking whether he could elaborate on the previous statement, he replied that according to him, the current measurements are not going to cut it, and he has little faith in the current equipment. It is too new, little proven record and uncertain for how long they will be efficient:

I really understand that we have a gas problem now, but you know, at 5 to 12 we are going to do everything, while we have made ourselves completely dependent on gas. Let us first find a good solution for the gas problem. [...] But yeah, I think it (the equipment) has not yet been sufficiently developed” (interviewee 3).

Similar to the previous participants, this interviewee also recognizes the larger picture, and geopolitical aspects. However, on the contrary, he supplemented his statement with the following sentence:

“Of course, we want to participate in the total global problems and that little bit that we can do to contribute, we have. Well, you know what It is, If I have to spent € 50,000 to be energy neutral in my home, then we have to do that. However, I believe that that actually is impossible in our home” (Interviewee 3).

4.1.4 Interview 4

The fourth interviewee was a 60-year-old, well-educated professional who is a partner at a private equity firm. He lives in an urban area in Eindhoven. He has not invested in making his home more energy efficient at all, from when it was built almost 30 years ago. Instead of investing in the existing house, he bought a brand-new house which is entirely sustainable, according to new building-code in the Netherlands.

The interviewee indicated he would have invested in energy efficiency if he had decided to live in the house. However, since he knows he will be moving to a very energy efficient home, there was no need. In the new house, all possible measurements have been taken.

In particular, he believed in doing things right. So, for him, it would either be a complete renovation or moving to a new, up-to-code, house. This is a point which returned in many interviews. The interviewees want to do it right in one time.

“Look, there must always be a mutation moment that you do that (sustainability), right? That is when the central heating boiler is replaced. Or that you say that you well, we are going to move then there comes a time when you do that [...], because you just see around you, that something has to be done. You can also see it in the climate” (interviewee 4).

The foremost barrier towards making their existing home more energy efficient, was related to the current equipment and technology:

“Those solar panels are anything but beautiful on a roof. Those hideous blue spots. Whether we use a cubic meter more or less gas was also no problem. It was not that we had a very high

energy bill either. [...] Look, you want to become more sustainable, but if it means that you have to install those hideous things (solar panels), or devices that make a loud noise (heat pump), you know that that is not practical and indeed a barrier” (interviewee 4).

Additionally, another barrier which was also evident in the previous interview, is that there was no trust that the current equipment and measurements (e.g., heat pump), will be as efficient in the future as they are today. He wanted to wait for more efficient and proven reliable concepts. Especially the enormity, loudness (inconvenience) and esthetically displeasing aspects of the heat pump and solar panels were a returning subject. Eventually, he accepted that the heat pump will be installed in his house, as he indeed felt the responsibility to do something:

“I think the heat pump may not be the ideal solution either, because of course it is a monstrosity of a thing, so to speak, so that there will be better solutions for that in the future. From the other side, yes, If you keep waiting for the ideal solution, then nothing happens again” (interviewee 4).

4.1.5 Interview 5

Interviewee 5 is a seasoned professional, who was a partner at a consultancy firm for approximately 20 years. After her retirement from the partnership, she picked up another role as managing director of a large insurance company. She lives in a semi-urban area near Amsterdam. There was something of a ‘mutation’ moment where children left the house, gas and electricity became more expensive after which she decided to make the house more energy efficient. The interviewee had a very well formulated answer as to what and why she decided to make the house more energy efficient:

“Reducing the depletion of the earth, but also saving costs huh? The costs (of gas and electricity) are incredibly high at the moment. [...] Furthermore, I do not want to have to worry about it (renovating) for the next 20 years. So, it also has to be future proof” (interviewee 5).

One of the foremost barriers or thresholds was to look for the subsidies:

“After some time searching, eventually you will find a kind of step-by-step plan how to apply for a subsidy. You really have to read everything 4 times to understand, but even then, it is unclear what exactly is reimbursed. And it is not an upfront subsidy either, it is only after the renovations have been made” (Interviewee 5).

The barrier regarding the distrust in the current equipment and measurements, was something that indeed crossed the mind of this interviewee. However, definitely not a barrier:

“Those heat pumps and the solar panels, everything develops through and through. At the same time, I think: You have to start once. I could also postpone it for another 5 years, but I will not. However, I did make sure that the infrastructure is already designed so that future or new equipment can be fitted.” (interviewee 5)

Another barrier which was named in the previous interviews, was that the currently available equipment, is hideous. This interviewee therefore hired an architect to make sure everything would look good, and to arrange the operational side of the renovation. The most important barrier for this interviewee was to acquire the knowledge to make sure everything is as it should be:

“Where do I get the knowledge from? Because I am not tech-savvy. I have no substantive affinity with the subject at all. I also have no knowledge of houses, building or remodeling or anything. I have to buy in all the knowledge. And how does one come about good knowledge? How do I make sure that I am at the right counter?” (Interviewee 5).

Although everything might be cheaper and more efficient in a few years, and one might therefore postpone, someone has to take the first steps. One comforting thought for the interviewee was that once she invests in the infrastructure for e.g., solar panels or heat pumps, that same infrastructure can be used for upgrades or more efficient equipment in the future:

“Also, Because you can say, for example, in 20 years there might be a much better heat pump. Then you replace the heat pump with a modern one. Or you put solar panels here which are more efficient. So, once you have made that infrastructure, then you can keep up with the innovations or with the innovations and technique that arise” (Interviewee 5).

4.1.6 Interview 6

Interviewee 6 is a middle-aged man, whose wealth originated from owning a family business. Before, he worked in the oil & gas industry. He lives in the middle of the Netherlands, in a rural area. This participant had his own house built, entirely according to his own desires and wishes, including it being climate neutral, with over 50 solar panels and a heat pump and no gas usage.

This interviewee, just like most others, recognized that his efforts will not necessarily contribute towards making a difference. Again, a macro-economic argument was named. However, as a wealthy man, he feels they (wealthy people) have the moral duty to take the first steps in the energy transition:

“What we do now makes no difference at all in terms of CO² reduction. That is kind of the problem of that energy transition for us what we do individually. If everyone would reason like that, then nothing will get accomplished. [...] That is why the energy transition must of course start at the rich, it must start with that and then there will automatically be scale and then it will all become cheaper” (interviewee 6).

His foremost reason to be involved in sustainability and investing in making his house more energy efficient, was because it was something that comes natural to him. Having worked in the oil & gas industry, and later on the wind-energy industry, he has great affinity with energy:

“I am not sure why. Why do People love animals or whatever. I have worked in the oil, gas, and energy industry for a long time, and I want to use as less as possible energy. But yes, you still want to do something right, so to speak. And It is also kind of the challenge because it is very difficult to get done” (interviewee 6).

One of the barriers, or rather annoyances in this case, was the effort to apply for a subsidy. Although it was not experienced as a barrier:

“I am not going to apply for a subsidy. I know I can get subsidies for certain things. but yes, I think that is so much hassle. Then I think: never mind, I will pay for it myself” (interviewee 6).

However, this interviewee indeed experienced some hinders in his journey. In particular related to the ‘cowboys’ in the industry of the self-proclaimed sustainability advisors:

“Especially the cowboys in that solar panel world, huh? And everyone has advice and then they open their laptop, and they all start filling in things, then I think yes, I can do that myself as well. I do not think I know anything about it. However, I do not want to do it all myself.” (interviewee 6).

4.1.7 Interview 7

Interviewee 7 is a highly educated, relatively young male, who lives in the western region of the Netherlands. He is a client of the healthcare banking client segment of Van Lanschot. However, the male has a background as tax specialist, and his partner is a general practitioner.

This interviewee bought a new home in a project. This means that the house is build up to code, and therefore very energy efficient. He was rather straight forward about the fact that he thinks this is not just a national problem but has more geo-political or macro-economic aspects. Moreover, he related energy usage to welfare or prosperity. The more a nation uses energy, the

more prosperous it becomes. Therefore, we must rather focus on generating ‘green’ energy, instead of reducing the energy usage:

“Ultimately for Africa, for example, it is precisely the prospect to use more energy and consequently become more prosperous. I do not think that we, the Dutch, or the West are able to say morally to people who still live in poverty, you may not consume more energy and therefore increase your prosperity because otherwise there are all kinds of environmental and climate aspects to it” (interviewee 7).

However, the choice for a newly build house was indeed quite conscious. The foremost motive to buy a newly-build house was to not worry about any future regulations surrounding sustainable housing. Also, to live in more comfort.

“The fact that we have bought a new-build home naturally means that you comply with the sustainability regulation that will take place in the coming years and in the coming decades. You are of course already a few steps ahead” (interviewee 7).

4.1.8 Interview 8

Interviewee 8 lives in the western region of the country, in a semi urban area. The interviewee is a client within the healthcare client segment and has her own general practice in the western region of the country. The couple decided to buy a piece of land and build their own house on it.

The foremost motivator for this couple to build their home as energy efficient as possible, was primarily to cut the costs and to have a future-proof house.

“It (the motivation) is twofold. I also think it is important for the environment, but I also saw a little bit of the developments regarding the regulation and fossil fuels. I do not have a crystal ball, but I did think, those fossil fuels, that is going to get more and more expensive, so that was also a reason for me” (interviewee 8).

Something that was named as well, were the more attractive rates at which the so called ‘green mortgage’ can be issued. This is 0.5% discount compared to the ‘regular’ Euribor rates.

“I think we would not have done it differently, if we had not received that interest discount, But that that was an extra stimulator towards making an action” (Interviewee 8).

This interviewee did not experience any real barriers or thresholds in the process of building the house and making it more energy efficient. This was mostly due to the fact that the contractor was a good friend and a real professional. He helped them with what choices to make.

4.1.9 Interview 9

The ninth interviewee is a highly educated male who lives in the western region of the Netherlands near Amsterdam, in an urban area. His background lies in engineering, and he is therefore very passionate about the materials used in the building process. The interviewee chose to completely renovate his existing house dating from beginning 1900, in order to build an as sustainable as possible house in that place.

This interviewee, however, does not exactly focus on energy efficiency, but on using sustainable materials. Especially the CO2 footprint of the materials had to be low. No new or baked materials only recycled or used materials are to be used.

“We took a preparation phase of more than two years, to find out everything there is to know about this topic. [...] With the idea of, If it is There and If it exists (the materials), then we want to apply it to the house” (interviewee 9).

This motives for this extensive and thorough renovation are purely based on intrinsic motivation. The exact motivation (“why does it motivate you intrinsically?”) could not be answered.

“It is an intrinsic motivation for me that that is a whole or well, the most important part. That is not money, because we get almost no return on all those materials. It is very difficult to explain the motivation. It is somewhere inside, so it is hard for me to name it. [...] However, I do know that I hate waste. That makes me genuinely grumpy” (interviewee 9).

This interviewee also paid some attention to the point that he feels responsible, as wealthy individual, to contribute to the climate, and that every little step counts.

“I strongly believe that with every choice you make, you can make a difference and that with every choice you make, you can make an impact. [...] Every little bit helps” (interviewee 9).

The foremost barrier was of an operational nature: it was difficult to find a contractor who was willing and experienced in using unconventional materials while building. With the help of an architect, most barriers were overcome.

“You can sum up those barriers in one word: contractors. It is a very conservative world in which they are not used to change [...] We also hired an architect who was experienced in this area, so that made it easier” (interviewee 9).

4.1.10 Interview 10

This interviewee, or interviewees, are an elderly couple who are retired healthcare professionals. They used to live near Amsterdam, but they bought an old farm in the eastern region of the country, near the German border.

The interviewees bought an old farm, which they will renovate completely in order to be as sustainable as possible. The interviewees also stated the importance of the materials to be used during the build, similar to interviewee 9. Mostly recycled or reused materials with a as low as possible footprint are used. The motivation for renovating as thorough, is primarily because of idealistic reasons:

“I go to Switzerland for over 40 years, to the same place. In the last 10-20 years, I see this beautiful glacier becoming smaller and smaller. Last year, it had almost disappeared. To me, that is a signal we really have to take action” (interviewee 10).

These interviewees had varying motives. Primarily, the motive was preserving the earth for now, and future generations to come. Also, macro-economic arguments were named, similar to what happened in the previous interviews.

“We want to preserve the earth for future generations to come. We believe that if nobody does it, it will not happen. Therefore we, those who can afford it, have to lead by example. [...] If we, as western world does not invest in sustainability, China will neither. [...] we also want to have a comfortable rest of our lives, with warm winters and cool summers inside the house” (interviewees 10).

For these interviewees, the return on investment was not important as well, similar to what has been said in other interviews. However, for the interviewees for other reasons: they will probably not live to see a lot, if any, return on investment:

“Indeed, we will most likely not become richer from our investment, or even see any return on the investment. But for us that is not of importance. Now, we want to contribute, and show others how it also can be done. Once we are in the process, we are also going to do everything that is possible. Money does not play a role. If you refrain from for example roof insulation because you can no longer afford it, you are doing the wrong thing” (interviewees 10).

The interviewees stated that they did not experience barriers as such, but rather ‘delays’. They had to buy-in all the knowledge. As they are not familiar with building or materials. As it was also the desire to build with materials with a low CO₂ footprint which was, particularly a

threshold. As states in interview 9, that interviewee experienced similar barriers. They hired an architect and an advisory firm for the sustainable materials and a contractor.

“At the beginning of the process we felt quite insecure about the different steps to take. Therefore, we sought for a reliable and experienced contractor and advisory firm. We wanted to do it perfect the first-time round” (interviewees 10).

Also, in terms of barriers, specifically the costs of the unconventional materials, there was a lot of uncertainty. The project turned out to be much more expensive than anticipated. However, as stated above, money does not play a role and was therefore not a barrier.

4.1.11 Interview 11

Interviewee 11 is the owner of a family business in the construction and development sector. He is a 44-year-old male who lives in the southern region of the country near Eindhoven. He lives in a rural area. He decided to buy an old farm, and to completely renovate it, to make it sustainable.

The first and foremost motive for this interviewee, were financial reasons. On one hand, the attractive subsidies which were available, and on the other hand the cost savings by living in an energy efficient house. Especially during these times, and the uncertain future period.

“So yes, say if you look at the investment and the return on investment, at first it is a financially attractive picture, let’s say” (interviewee 11).

Another motive for this interviewee was making the home future-proof. That for the coming 30-40 years, he did not have to worry about the state of the house, in terms of sustainability and energy efficiency. This interviewee thinks similar than others; when it is done, it will be done right.

“if you do it, I believe you have to do it right the first time, so that for the next 30 years 40 years you do not have to worry about it. The most important thing is the combination of comfort and the financial benefits in the long term and short term [...] If you want to get it right the first time, you actually have to strip your house completely and rebuild it. So that is what I did.” (interviewee 11).

Another aspect that motivated this interviewee, were the subsidies. As stated in previous interviews, most interviewees did not bother with those due to the administrative and bureaucratic processes. To this interviewee however, it was a motive:

“I noticed that on some places it is fairly easy to get subsidy, so to speak. I received quite a lot of subsidies for the renovations. Also from the government, all kinds of sustainability possibilities during the renovation. For example, if you put triple glass in your home. You get a substantial subsidy for that” (Interviewee 11).

The interviewee did not experience any barriers that withheld him from renovating the home. Especially because it is his own profession and personal interest, he knew rather well how and what to do.

4.2 Analysis

Whereas the previous chapter presented the findings of this research in an empirical, non-interpretive manner, this chapter interprets these empirical results, according to the Gioia method described in chapter 3. The results will be elucidated in this chapter. For a more comprehensive understanding of the framework, see appendix B. Firstly, an oversight of the complete data structure is presented in Figure 3 below. An enlarged copy of Figure 3 can be seen in Appendix D. The exhaustive analysis can be found in appendix E. In Appendix E, it is shown what direct quotes were used. Moreover, it can be seen that the 1st and 2nd order codes were allocated to three topics: motivational forces, impediment forces and contextualizing the renovation. Consequentially, it can be seen in what first-order codes (informant-centric codes) they were composed. Furthermore, below Appendix E it can be seen how the second-order codes (theory-centric codes) were constructed and lastly the subsequent aggregate dimensions.

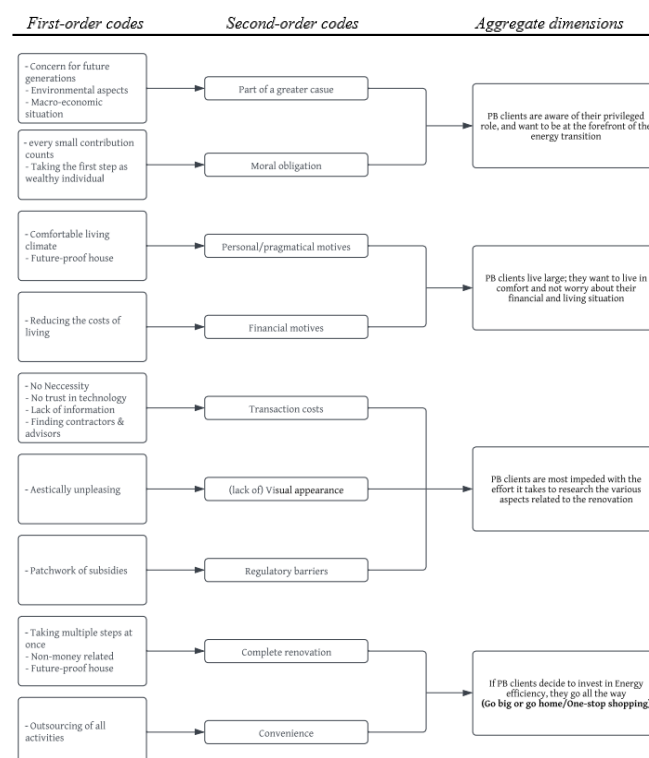


Figure 3 Summary of the data structure, using the Gioia Analysis

4.4.1 Private Banking clients are aware of their privileged position

As can be seen in Figure 3, the first outcome, or aggregate dimension, is that the Private Banking client is conscious of their privileged position in the society, and consequently wants to be at the forefront of the energy transition. Indeed, the second part of the sentence is a consequence, but nevertheless of importance in this aggregate dimension. This finding can be allocated to the ‘motivational forces’ category. At the end of this chapter, on page 39, a figure can be found with the second-order codes and the corresponding aggregate dimensions. The following second-order codes contributed to this finding:

Being part of a greater cause

A large portion of the interviewees, namely interviewees 1, 2, 4, 6 and 10 experienced a strong tendency towards being part of something greater than themselves. Throughout the interviews, it became clear that those interviewees indeed did not care about the money or other potential benefits; solely contributing to a greater cause was sufficient to motivate them. The interviewees also expressed concern for preserving the world and the climate, for future generations:

“We all need to make contributions to improving the quality of life for our children and our children's children and beyond” (interviewee 1);

“Just let my generation pick up the bill and pay for future generations, That's fine” (interviewee 2).

Additionally, they experienced a bigger picture and named macro-economic arguments, such as developments in China and India, and how they could contribute to that. Moreover, the environmental aspects were of specific importance to them. Especially because of their privileged position, namely belonging to some of the wealthiest percentile in the Netherlands, they felt they could contribute. Some characteristic quotes are:

“The emerging markets and countries can benefit from the activities and the things we do” (interviewee 1);

“If we, as western world, do not invest in sustainability, China or India will neither” (interviewee 10).

Moral obligation

Additionally, as the majority of the interviewees were aware of their privileged position, experienced a moral obligation towards making a difference and giving a signal towards to

‘other’ people in the society that they, the wealthy, are prepared to take the first step. Moreover, this group felt that every little step counted towards making an impact. One characteristic quote is the following:

“The energy transition must start with the rich, it must start with us and then there will automatically be scale and then it will all become cheaper for the rest” (interviewee 6).

This was indeed the tendency during the interviews. One other, similar quote is the following:

“Therefore we, those who can afford it, have to lead by example” (interviewee 11).

4.4.2 Private Banking clients live large

This aggregate dimension, or finding, can be allocated to the motivational forces as well. The Private Banking client belongs to some of the wealthiest people in the Netherlands. Often, this means that they have a relatively large house and ditto expenses. A large portion of the interviewees expressed that they think comfort is an important motivating factor for them. Additionally, they do not want to worry about their financial bill either. Therefore, the second-order concept ‘Financial motives’ is not necessarily concerned with a return on investment, but rather with having to have no concern regarding the electricity or gas bill.

Personal and pragmatical motives

Especially the more ‘seasoned’ Private Banking clients named this argument as a motive to make their home more energy efficient. After all, a completely renovated house which is energy efficient provides a more pleasant living climate than houses which are not. This point especially concerns that the inhabitants of the house have nice, warm winters and cool summers inside the house, without using an excessive amount of energy of gas. Therefore, this motive is based on a more pragmatic and personal basis.

“We want to have a comfortable rest of our lives, with warm winters and cool summers inside the house” (interviewee 10);

“It is not about me increasing the value of the house. It is not. It is now pure living pleasure, comfort and living in it” (interviewee 1).

Financial motives

Indeed, the Private Banking clients are not immune to the recent energy and gas price developments. However, they indeed had a more insightful foresight, and most noticed that fossil fuel prices would not be as low as they were a few years ago. Almost all interviewees had

already finished their renovation, and can therefore currently reap the benefits, while the gas and energy prices are indeed on an all-time high. However, there were also strong sounds from interviewees that for them, it is definitely not a calculation and definitely not about the money or return on investment. It is however noteworthy, as some indeed brought up the point.

“I also saw the developments regarding the fossil fuels. I do not have a crystal ball, but I did think, those fossil fuels, that is going to get more and more expensive” (interviewee 8);

“If you look at the investment and the return on investment, it is a financially attractive picture” (interviewee 11).

4.4.3 Private banking clients are most impeded with the effort the research takes

This finding can be allocated to the impedimental forces. Indeed, in the previous chapters, this would have been ‘barriers’. However, during the course of the interviews, the researched found that none of the interviewees actually experienced barriers, but rather impedances. The definition of experiencing a barrier in this context, would imply that an interviewee could not come across that barrier. An impedance, however, merely delays or slows down. Therefore, in the context of this research, ‘impede’ is more suitable. In chapter 5.3, this choice will be elucidated. The impedimental forces in this chapter are related to the ‘barriers’ arising from the literature, described in chapter 2.1.3.

Transaction costs

This impudence concerns the time spent from the consumer towards all the different partners to work with. Examples are finding the correct renovation options, the company, approvals, acquiring a green loan/mortgage and monitoring the renovation process. During the interviews, it became evident that the Private Banking clients are accustomed to a certain service, where they do not want to do all the research and ‘groundwork’ themselves. They would prefer to have a party which arranges most of the operational aspects of the renovation. Additionally, most of the interviewees are business owners or professionals who have a very busy schedule. They cannot afford to spend much time on researching the different parties, measurements and renovation themselves.

“It is also important that I can find someone who can fix it who is reliable, without it having much effect on me” (interviewee 1);

“if I didn’t have a contractor who thinks pro-actively on my behalf, I probably would not have done it (the renovation)” (interviewee 2);

“Especially the cowboys in that solar panel world, huh? There are so many similar, self-proclaimed experts” (interviewee 6).

(lack of) visual appearance

One of the barriers which actually withheld some of the interviewees, was the visual appearance of the current equipment. In particular, this was related to the solar panels and the heat pump. The solar panels were experienced as “hideous blue spots” and the heat pump was described as “monstrosity of a machine” which makes a “hell of a sound”. Therefore, those interviewees decided not to invest in that equipment. On the other hand however, many interviewees refuted this argument, by either hiring an architect, or placing the solar panels on a more convenient location and not on the roof.

Regulatory barriers

This barrier, or impedance, primarily concerns the subsidies which are available from the local and national government. Most of the interviewees were indeed aware of these subsidies, and knew that they could qualify for these subsidies, but most of them did not bother to apply for these subsidies. Often, the process was considered as ambiguous, a hassle or having no patience for it. They either financed the renovation by a (green) mortgage, or by own means. Therefore, again, the name ‘barrier’ is not very appropriate, as all interviewees who did not apply for the subsidy, still pursued with their renovations. Perhaps, this is also related to the ‘transaction costs’ barrier. The Private Banking clients are rather busy and have therefore no patience, time or reluctant to invest their time in these, for them, relatively small amounts of money.

“I know there are all these subsidies, but those are hard to find and then the subsidy pot is empty again” (interviewee 1);

“If you have to investigate into what subsidies, you get and things like that. [...] I have no patience for that” (interviewee 2);

“I am not going to apply for a subsidy. I know I can get subsidies for certain things. but yes, I think that is so much hassle” (interviewee 6).

4.4.4 Go big, or go home

This finding does not relate to motives nor impedances, but rather to contextualizing the renovation process. In the interviews with the Private Banking clients, the method of how they approached such a renovation was discussed as well. These discussions eventually led to the

final finding of this research: the Privat Banking client want to do the renovation right at once: go big or go home. All of the interviewees who renovated an existing building, house, hired an architect to make the building visually pleasing. Additionally, they hired an advisory agency for what materials and steps, or measurements could be taken and a contractor to carry out the renovation.

Complete renovation

The majority of the interviewees who choose to renovate an existing building, started from the ground up. So, they stripped the entire building. Multiple interviewees stated that it makes no sense to just take one step at a time: when you do it, you have to do it right (go big or go home). In combination with an above average budget and willingness for the renovation, it indeed makes sense to do it right at once:

“Only solar panels do not make a difference, but the whole in combination [...] indeed make a difference” (interviewee 2);

“if you are going to make it more sustainable, it has to be a combination of everything” (interviewee 12);

“Once we are in the process, we are going to do everything that is possible. Money does not play a role. If you refrain from for example roof insulation because you can no longer afford it, you are doing the wrong thing” (interviewee 10).

More importantly, interviewees 2, 9 and 10 stated that money it no object for them in this renovation.

“I am a bit disappointed by the discussion that it is all a calculation for return on investment. My biggest annoyance is at parties, about the ‘cost recovery period” (interviewee 2);

“we will most likely not become richer from our investment, or even see any return on the investment. But for us that is not of importance” (interviewee 10).

Convenience

The interviews made it evident that in the process or renovation, convenience is a very important aspect. This aspect is related to that barrier of ‘transaction costs’. The interviewed Private Banking clients do not want to hassle or invest too much time and energy than necessary in this project of renovating. Combined with the fact that almost every interviewee who

renovated an existing home has hired an architectural firm and advisory firm to advise them, the conclusion can be drawn that convenience is indeed of importance:

“If I have to spend € 50,000 once to be energy neutral in my home and it is done, then we have to do that (interviewee 3);

“We hired an architectural firm, advisory firm and a contractor to arrange everything” (interviewee 10);

“it is also important that I can find someone who can fix it who is reliable, without it having much effect on me” (interviewee 1).

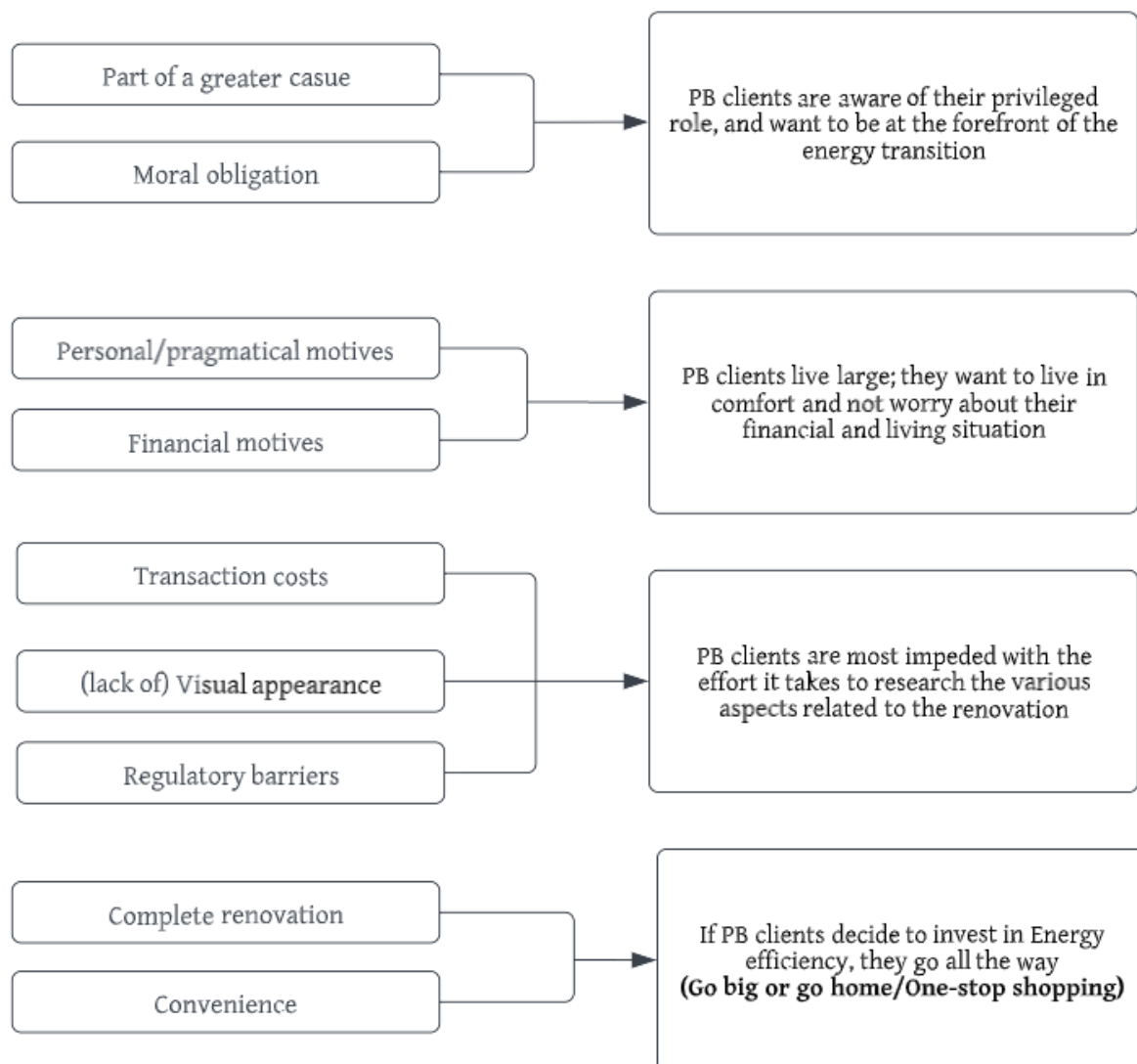


Figure 4 Oversight of second-order codes and the corresponding aggregate dimensions

5. Discussion

In this chapter, the findings from chapter 4, the Gioia analysis, will be up for discussion. The findings will be discussed based on the expectations that were present before the analysis and compared with the existing literature as presented in chapter 2. It is highly recommended to have the summary of the data structure (Appendix D) in mind when reading and contemplating this discussion. This way, the results can be understood best. Before the research question is answered in part 5.4 of this chapter, the four findings will be discussed. As a final note: In the introduction, it was written that very little academic research has been conducted towards this specific target group. Most existing research is of a quantitative nature and over the ‘general population’. Therefore, the existing theories surrounding motives and barriers are not specifically geared towards this target group. Consequently, most findings were somewhat surprising and deviated from what has been researched in the existing literature.

5.1 Private Banking clients are aware of their privileged position

The first finding was not completely aligned with what my expectation was before performing the analysis. The finding is as follows: Private Banking clients are conscious of their privileged position and want to be at the forefront of the energy transition. When contemplating possible results of the analysis both for myself and within the company of Van Lanschot, this rather idealistic and self-aware motive was not one that was top of mind. Although it was expected that the Private Banking clients would be at the forefront of the energy transition, the rationale behind that expectation was anticipated to be because of financial reasons. The outcome that it was because the private banking clients are aware of their privileged position, and that they want to contribute accordingly, was rather surprising.

Moreover, it was interesting to see that this motive unveiled itself, rather than that it was a focussed question or preconceived topic. Indeed, this ‘privileged position’ argument was not found in the literature, nor was it a topic of conversation during exploratory interviews with stakeholders within the bank. This research confirms a theory that has been written in chapter 2.1.2 ‘going green’. In this chapter, several theories regarding age and sustainability attitude are presented. In particular, the special role and attitude of the millennial towards going green.

Research by Naderi & Steenburg (2018) suggest that millennials are more attitudinally green, rather than behaviourally green. Millennials are individuals born between 1982 and 2000, give or take a few years (Klein, 2018). This distinction between ‘behaviour’ and ‘attitude’ is confirmed by other research as well (Bernardes et al., 2019; Da Silva & Pownall, 2018). Although only one millennial was included in the interviewees, due to the fact that Private

Banking clients are generally older, this can indeed be confirmed. That particular interviewee had a rather positive attitude towards sustainability; however, it was not shown. Additionally, Wiernik, Ones & Dilchert (2014) found no significant relationship at all; the insignificant relationships however, leaned towards a positive relationship between age and environmental sustainability. This was also recognized during the interviews. Those who stated money was no object and wanted to contribute to the global problem, were indeed older.

Moreover, the many macro-economic arguments that were named during the interviews were also rather surprising. Especially the fact that the clients recognised and acknowledged that what they individually contribute, does not matter. However, it is rather about giving a signal and creating scale and awareness.

First order quotes:

“If we, as western world, do not invest in sustainability, China or India will neither (interviewee 10); “What we do now makes no difference at all in terms of CO2 reduction [...]it must start with the rich and then there will automatically be scale and then it will all become cheaper for the rest of the world” (interviewee 4)

Again, these motives were not discovered in the exploratory interviews and literature. Consequently, the second-order code that the private banking client feels a moral obligation to contribute was also rather surprising. Although it might be allocated to the motive “I want to make a positive contribution to the environment and my surroundings”, the moral obligation motive has, I believe, a different nature as it finds its origin in the perceived privileged position the interviewee finds itself in.

5.2 Private Banking clients live large

The finding that private banking clients live large, and also want a corresponding level of comfort and rather worry-free life, is something that was expected. This was not discovered in the literature, but rather during the exploratory interviews and conversations with stakeholders within the bank. Additionally, I personally contemplated that this would indeed be one of the topics of the research. However, I did not expect it would lead to an aggregate dimension.

First order quotes:

“It is not about me increasing the value of the house. It is not. It is now pure living pleasure, comfort and living in it” (interviewee 1); “The most important thing is the combination of comfort [...] in the long term and short term” (interviewee 11).

This first part of the finding combines very well with the second part of this finding, namely that the private banking clients want to plan their renovation in such a way, that it is future proof and they do not want to have to worry about it for the coming decades.

First order quotes:

“I do not want to have to worry about it (renovating) for the next 20 years. So, it also has to be future proof” (interviewee 5); “if you do it, I believe you have to do it right at once, so that for the next 30 years 40 years you do not have to worry about it” (interviewee 11).

Another important motive appeared to be the ‘reducing the costs of living’. Indeed, the private banking clients stated that they also are not immune to the rising energy costs. Especially those in large and old buildings. The Dutch central bureau for statistics (CBS) has calculated that in 2022, especially those in relatively old, and in particular those in old large residential houses will pay higher gas and energy bills, up to 95.7% higher than in 2021 for the aforementioned category (CBS, 2022). However, this calculation is currently rather conservative, given the rapid developments since the inception of this thesis. However, this finding should not be interpreted as if the private banking clients want to save a quick buck. The basis for this motive is rather that they do not have to worry about those aspects of their lives. After all, most interviewees will have little trouble paying the higher energy bill.

5.3 Private banking clients are most impeded with the effort it takes

Indeed, as shortly described in chapter 4.4.3, the term ‘barrier’ has been abandoned, albeit symbolically. During the course of the interviews, it became evident that none of the interviewees experienced barriers in the process of making their home more energy efficient. Rather, they were impeded. After all, if they decided to do something, they managed to get it done. None of the interviewees decided not to do something or take certain measures, as a consequence of a barrier.

Nevertheless, during the interviews the barriers which are described in chapter 2.1.3 were still used as talking points. From those 6 barriers which were identified in the literature, 3 were actually applicable in the results of the interviews. The most prevalent barrier was the one regarding the transaction costs. This barrier relates to the time and effort spent towards all the different partners to work with, and measurements to take. A quote which ensembles this barrier is the following:

“it is also important that I can find someone who can fix it who is reliable, without it having much effect on me” (interviewee 1); “Where do I get the knowledge from? [...] I have to buy in

all the knowledge. And how does one come about good knowledge? How do I make sure that I am at the right counter?" (Interviewee 5).

More specifically, this concerns the entire process for which research is needed. For example, that there is no trust in the current technologies, looking for an experienced and reliable contractor and most notably applying for subsidies. Especially those subsidies are peculiar. Beforehand, I would have expected that those are important for the interviewees, based on my own personal experience and explorative talks with stakeholders. However, almost every interviewee who renovated their existing house (only then you qualify for a subsidy) did not apply for it. It was either too much hassle or a pain to apply for the subsidies. Therefore, most interviewees choose to finance the renovations either themselves or by a (green) mortgage:

First order quotes:

"I know there are all these subsidies, but those are hard to find and then the subsidy pot is empty again" (interviewee 1); "If you have to investigate into what subsidies you get and things like that. [...] I have no patience for that" (interviewee 2).

This finding was indeed expected, and also related to the second finding. They want to have most aspects to be arranged for them, without having to do the legwork themselves. This is also where a Private Bank as Van Lanschot can indeed make a difference. It is the very reason why Private Banks exist: provide a more comprehensive service to those that can afford it. As it turns out, for the interviewees, this is not only for their financial affairs, but also for their personal affairs, related to their renovation.

5.4 Go big or go home

This last finding is related to the contextualization of the renovation of an existing house. This finding has a rather pragmatical nature. It contextualizes the process of renovating the house of the interviewee. Although this was not specifically a target outcome of study, it turns out that during the course of interviews, a lot of the interviewees discussed not only 'why' they choose to renovate, but also 'how' they proceeded with the renovation. Therefore, as is inherent to the Gioia method, I revised my interview guide accordingly. Consequently, this provided me with another, rather unexpected, aggregate dimension.

During the course of the interviews, it became evident that the interviewees do not take half measures; they want to do it right at once. Hence; Go big or go home. Especially those who choose to renovate an existing house, stated that it makes little to no sense to do gradually make the house more energy efficient. Some first order quotes which characterize this phenomenon:

“Only solar panels do not make a difference, but the whole in combination [...] indeed make a difference” (interviewee 2); “Once we are in the process, we are going to do everything that is possible. Money does not play a role. If you refrain from for example roof insulation because you can no longer afford it, you are doing the wrong thing” (interviewee 10); “if you do it, I believe you have to do it right the first time and start from the ground up” (interviewee 11).

Combined with the finding that money plays a small role for the interviewees, this outcome makes a lot of sense. In hindsight, I think this finding was also to be somewhat expected. Moreover, most interviewees hired architects to design the house. I think that this finding can also be related to the second finding, related to the comfort. They do not want to worry about their living situation in the coming decades.

The fact that money does not play a role in the renovation, is an outcome I was not sure about at the beginning. I have mixed experiences with clients of Van Lanschot. Some of them notice every penny that leaves their pocket, and some of them live large and do not care about money. However, these interviewees indicated that money does not play a role when it comes to the climate and making their home more energy efficient. Some typical quotes:

“It is an intrinsic motivation [...]. it is not money, because we will hardly get return on all those materials” (interviewee 9); “we will most likely not become richer from our investment, or even see any return on the investment. But for us that is not of importance” (interviewee 10); “I am a bit disappointed by the discussion that it is all a calculation for return on investment. My biggest annoyance is at parties, about the ‘cost recovery period’” (interviewee 2).

6. Conclusion

In this chapter the practical and theoretical and practical implications will be discussed. Finally, the limitations of this research will be discussed and suggestions for future research will be proposed.

6.1 Answering the research question

Beyond the four main findings in the form of aggregate dimensions, the research started out with the objective to answer the following research question: *What motivates and hinders the Dutch private banking client towards making their home more energy efficient?* During the course of this thesis, the main research question is answered to a high degree. In this chapter, the relevance of the findings related to the research question will be discussed.

The research question comprises out of two parts, namely the motivations towards making the home more energy efficient, and the second part is what hinders the private banking client towards doing this. The first part, the motives, has been answered rather extensively. This first part has been answered through finding 5.1 and 5.2. Both these aggregate dimensions provide a comprehensive theory on why the private banking client chooses to make their home more energy efficient. On one side, because they experience that they, the wealthy individuals, have to take the first steps as a moral obligation, on the other hand because they experience they can contribute to a greater cause. However, since this is an inductive study, deductive, or quantitative, research should be performed in order to provide a more valid answer to the question what exactly motivates the private banking client, and to what degree, to make their home more energy efficient.

The second part of the research question, the hindrances barriers of whatever impeded the private banking has been answered to a high extent as well. In chapter 5.3 this is described in detail. The foremost factor that impeded the private banking clients is that it takes a significant amount of effort and energy to start the process of the renovation. Especially finding a reliable and experienced contractor, looking for subsidies and finding the correct information and equipment has turned out to be a particular hassle. Everything else, such as concerns about money, return on investment or behavioural barriers were not named. Again, since this is an inductive study. Deductive research should be performed in order to provide a more valid answer to the question what exactly impedes the private banking client to make their home more energy efficient.

6.2 Theoretical and practical implications

The theoretical implications contribute predominantly to the field of social sciences and green finance, in particular the green mortgages. This research fills the research gap that existed in the current literature, namely that, to my best knowledge, this target group has not been researched before in this context at the time of writing. Moreover, this topic ‘green mortgages’ is often researched from a quantitative point of view, and therefore lacking the more basic information. Since this target group has never been researched before, the qualitative research method lends itself perfectly for this research.

The findings of this research also has practical relevance. Foremost, for banks and other credit-lenders, but also contractors and other service providers involved in the green mortgage ecosystem. It is estimated that 75-90% of the current building stock will still be standing by 2050 (European Covered Bond Council, 2022). Therefore, when attempting to realize net-zero by 2050, home improvements and its relatively large proportion of the total emissions will be one of the foremost accelerators in reducing the greenhouse gas emissions. Within that building stock, the wealthy individual with relatively large and old houses, requires renovations. This research contributes to that scenario, as the target group’s motives and hindrances had not been research before. The company of whose client I had the privilege to interview, Van Lanschot, could use the results of this interview in a marketing campaign based on the four different findings of this research.

6.3 Limitations

This research has some limitation, primarily resulting from its mythology and choices that were made. Therefore, the following limitations must be taken into consideration:

The foremost limitation is related to the methodology of this research, namely it being of a qualitative nature. Although the choice for this qualitative approach is well-substantiated, it also has its limitation. The most important limitation is that this research cannot be generalized among other private banking clients and their motives and barriers in making their home more energy efficient. In order to generalize these findings, a quantitative study is required in addition.

The second limitation is also related to the reliability of the methodology, namely conducting interviews with clients. Therefore, the necessary precautions have been taken. For example, trying to create a relaxing interview environment, ‘breaking the ice’ and promising anonymity. However, it is still possible that some interviewees gave socially accepted answers

to somewhat sensitive questions, and therefore not being completely honest. In order to avoid this kind of behaviour, the ‘laddering technique’ has been used, in combination with asking open-ended questions. Nevertheless, it must be considered that this behavioral occurs during interviews.

The third limitation is related to the method of analysis, namely the Gioia method. The conceiver of this method, Dennis Gioia, states the following: *“A major risk is “going native”, namely, being too close and adopting the informant’s view, thus losing the higher-level perspective necessary for informed theorizing. For that reason, we always have one member of the collaborative team adopt an outsider perspective—a devil’s advocate, really, whose role it is to critique interpretations that might look a little too gullible”* (Gioia, Corley, & Hamilton, 2012, p. 19). Given that this research was conducting by one researcher, no devil’s advocate was present.

6.4 Future research

The results from this study has helped to gain a better understanding of the decision process of making the private banking client’s house more energy efficient. However, this is only the beginning of the contextualizing among the motivations and barriers in this process. Additionally, it must be considered that the result of this study is only based on the Dutch private banking client. Therefore, further research is suggested among different European Union member countries. Especially larger countries, who have more potential to contribute to the reduction of the CO2 emissions in the EU. After all, the goal is to get to net-zero in 2050.

Another Segway into further research would be to research and compare a different client segment, a comparative study. In this research, the private banking clients were investigated. However, this is only a small group of individuals compared to the large, institutional banks such as ING, Rabobank, or ABN AMRO.

As stated in chapters 5.5 and 6.2, the results of this study would be strengthened by performing an additional quantitative analysis in order to generalize and substantiate the findings from this research.

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8. Appendices

Appendix A: Dutch CO2 emissions

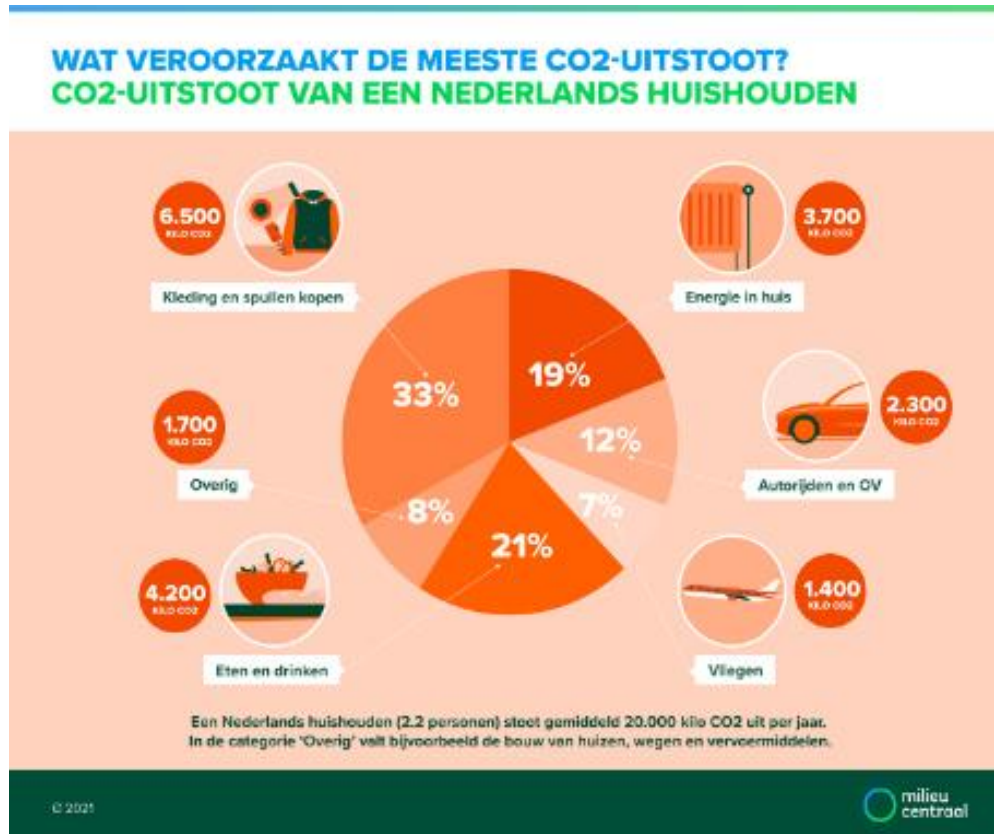
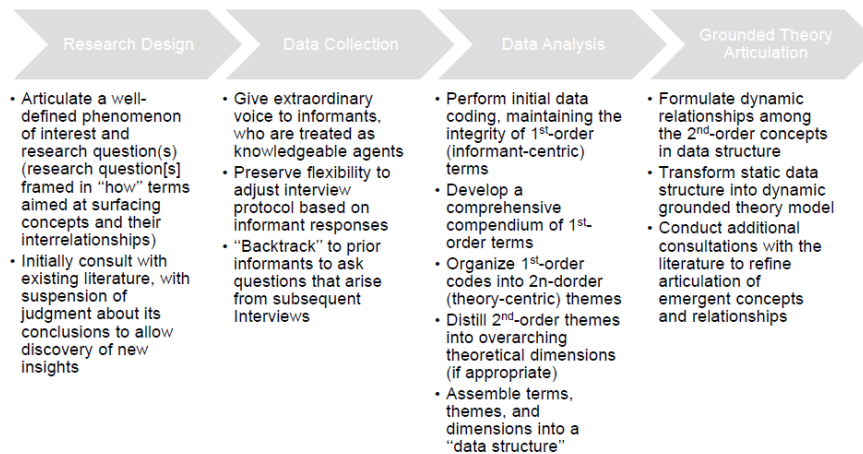


Figure 5 Visualisation of the CO2 emission categories and the role of houses

Appendix B: The Gioia methodology process

The Gioia methodology process



Appendix C: interview guide

Introduction

1. Tell us what the purpose of this interview is, why this customer was chosen and what we as Van Lanschot will do with the customer's information. Also, questions about who the customer is, contact with Van Lanschot and why the customer is willing to cooperate.

Start interview

2. Introduction to making the home more sustainable. Hereby explain what we mean by the 'sustainability of the home'. (e.g.: by this we mean making your home more energy efficient, and ultimately improving your energy label)
3. Before we begin, I want to ask you the question: When you think of sustainability conceptually speaking, what is the first thing that comes to mind?
4. What is your position on making your home more sustainable?
5. I think this leads to a conversation about whether or not the customer has made the house more sustainable, and what the main reasons for this have been.
 1. What is your stance on sustainability and housing?
 1. Positive/negative/neutral
6. Follow-up question if the house has been made more sustainable: which energy label did your home have before it became more sustainable, and which did you achieve?

Questions regarding motivations

7. What would be a motivation(s) for you to make your home (even) more sustainable?
 - If it is made more sustainable: What were the most important reasons for you to make your home more sustainable?
 - If not made more sustainable: What would be an important reason for you to make your home more sustainable?

Support: check if some of the motivations are mentioned

- Make a positive contribution to the environment and my surroundings
- Save costs by reducing my energy bill
- Save costs by means of a lower interest rate on my mortgage
- Increase the value of my home
- Keep my home up to date, for future generations
- Achieve a financial return, as an investment

Questions regarding Barriers towards sustainability

7. What barriers have you encountered in the process of sustainability?
8. What would get in the way of you making your home (further) more sustainable?
 - If it is made more sustainable: What barriers have you encountered during sustainability?
 - If not made more sustainable: Which barriers have ensured that you have not, or have not yet, made your home more sustainable?

Support: check if some of the motivations are mentioned

- Uncertainty about the costs of the process or how much it will bring you
 - (Behavioural barriers)
- The time and effort it takes to find the right sustainability measures
 - (Transaction costs)
- Finding an attractive and appropriate financing
 - (Financing)
- Lack of clarity about which measures what return yields
 - (Data insufficiency)
- Obtaining an energy label
 - (Regulation)
- I prefer to leave the money in the form of an inheritance, instead of investing it in my home
 - (Inheritance)

Closing & conclusion

We have just talked about making your home more sustainable. Both the barriers and the motivations to become more sustainable have been passed.

9. What role do you think Van Lanschot can play in assisting in making the home more sustainable?

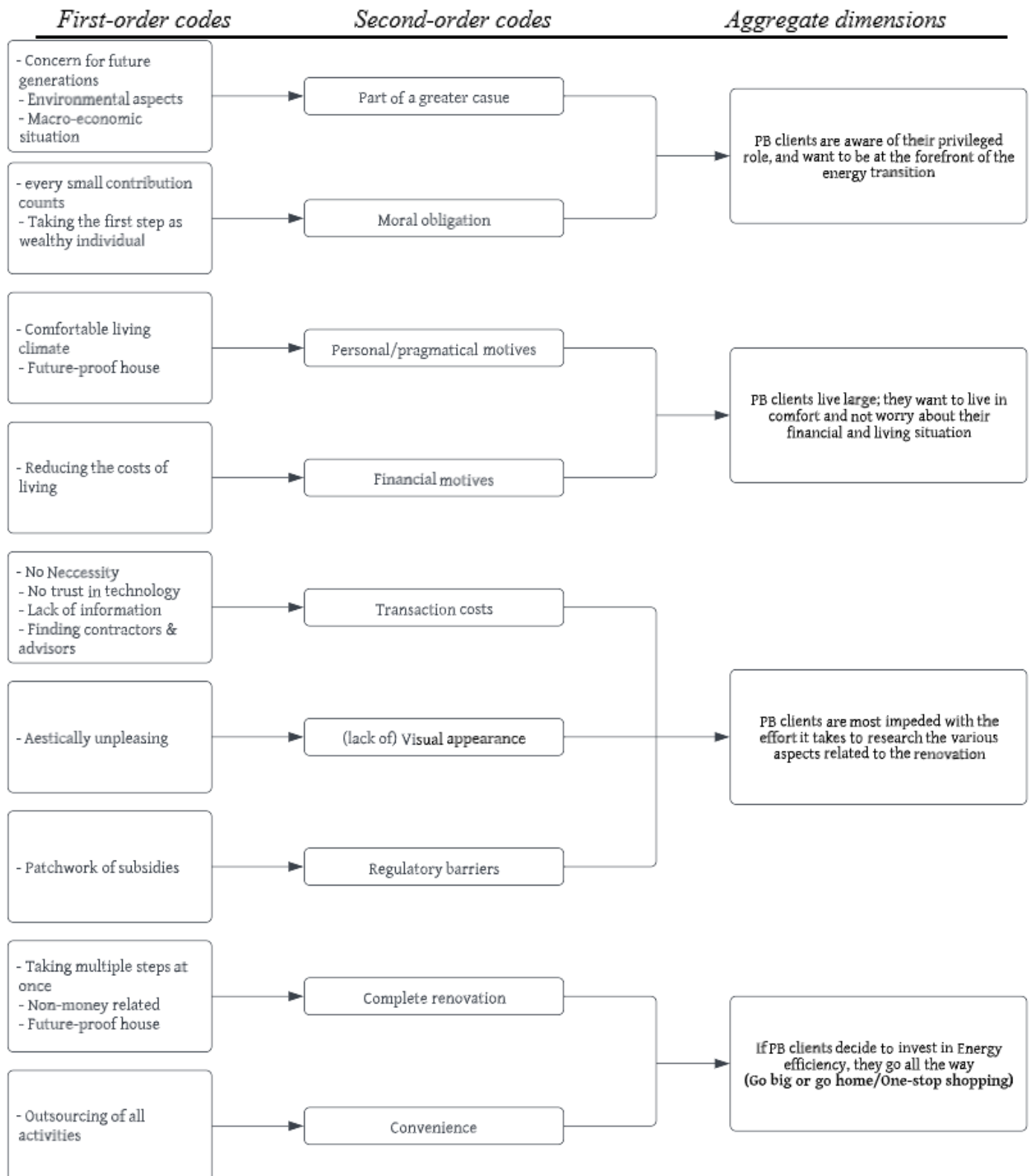
Thanking for the time and effort and asking if the customer is interested in the results of the survey.

Final remark:

are their things that have not come up, but that you would like to explain or that you would have expected in this interview / have we missed something

Have there been or not discussed things that you still want to respond to?

Appendix D: The data structure



Appendix E: Gioia Analysis

Direct quotes to first order codes

<i>Motivational forces</i>	
<i>Direct Quotes</i>	<i>First order codes</i>
<ul style="list-style-type: none"> • “we all need to make contributions to improving the quality of life for our children and our children's children and beyond” (1) • “just let my generation pick up the bill and pay for future generations, That's fine” (2) • “We want to preserve the earth for future generations to come. We believe that if nobody does it, it will not happen” (10) 	Concern for future generations
<ul style="list-style-type: none"> • “the energy transition must start with the rich, it must start with us and then there will automatically be scale and then it will all become cheaper for the rest” (6) • Now, we want to contribute, and show others how it also can be done (10) • Therefore we, those who can afford it, have to lead by example (11) 	Taking the first step as wealthy individuals
<ul style="list-style-type: none"> • “What we do now makes no difference at all in terms of CO2 reduction. However, it does give a signal” (6) • “I strongly believe that with every choice you make, you can make a difference and that with every choice you make, you can make an impact (9) 	Giving a signal
<ul style="list-style-type: none"> • “The emerging markets and countries can benefit from the activities and the things we do” (1) • If we, as western world, do not invest in sustainability, China or India will neither (10) • “What we do now makes no difference at all in terms of CO2 reduction [...] it must start with the rich and then there will automatically be scale and then it will all become cheaper for the rest of the world” 	Macro-economic situation
<ul style="list-style-type: none"> • In the last 10-20 years, I see this beautiful glacier becoming smaller and smaller. (10) • because you just see around you, that something has to be done. You can also see it in the climate” (4) • It is all about the money for most, whereas in the end the goal is to contribute to the environmental well-being. (2) 	Environmental aspects
<ul style="list-style-type: none"> • “We want to have a comfortable rest of our lives, with warm winters and cool summers inside the house” (10) • It is not about me increasing the value of the house. It is not. It is now pure living pleasure, comfort and living in it” (1) • The most important thing is the combination of comfort [...] in the long term and short term (11) 	Comfortable living climate
<ul style="list-style-type: none"> • “I do not want to have to worry about it (renovating) for the next 20 years. So, it also has to be future proof” (5) 	Future-proof living

<ul style="list-style-type: none"> • “The fact that we have bought a new-build home means that we comply with the sustainability regulation that will take place in the coming decades. (7) • if you do it, I believe you have to do it right at once, so that for the next 30 years 40 years you do not have to worry about it” (11) 	
<ul style="list-style-type: none"> • “if you look at the energy costs, I think it is clear to everyone that you have to do something now” (1) • I also saw the developments regarding the fossil fuels. I do not have a crystal ball, but I did think, those fossil fuels, that is going to get more and more expensive” (8) • if you look at the investment and the return on investment, at first it is a financially attractive picture” (11) 	Reducing the energy bill
<ul style="list-style-type: none"> • “I think we would not have done it differently, if we had not received that interest discount, But that that was an extra stimulator towards making an action” (8) 	Reducing the mortgage costs

Impedimental forces

<i>Quotes</i>	<i>First order codes</i>
<ul style="list-style-type: none"> • “I am a bit of a bon-vivant. [...] I think they are really going a bit over the top with sustainability now. For me, comfort and quality of life is most important” (3) • “Whether we use some cubic metres more or less gas is also no problem (4) 	No necessity
<ul style="list-style-type: none"> • “I think it (the equipment) has not yet been sufficiently developed and has no proven record” (3) • “I think the heat pump is no ideal solution either because it is a monstrosity of a thing. There will be better solutions for that in the future” (4) • “Those heat pumps and the solar panels, everything develops through and through. At the same time, I think: You have to start once. I could also postpone it for another 5 years, but I will not” (5) 	No trust in technology
<ul style="list-style-type: none"> • “Those solar panels are anything but beautiful on a roof. Those hideous blue spots” (4) • “We hired an experienced architect, so the renovation looks good” (10) • “I live in a nice neighbourhood, and those solar panels ruin the view” (8) 	Aesthetically unpleasing
<ul style="list-style-type: none"> • “I know there are all these subsidies, but those are hard to find and then the subsidy pot is empty again” (1) • “If you have to investigate into what subsidies, you get and things like that. [...] I have no patience for that” (2) • “I am not going to apply for a subsidy. I know I can get subsidies for certain things. but yes, I think that is so much hassle” (6) 	Subsidies

<ul style="list-style-type: none"> • “it is also important that I can find someone who can fix it who is reliable, without it having much effect on me” (1) • “if I didn’t have a contractor who thinks pro-actively, I probably would not have done it” (2) • "You can sum up those barriers in one word: contractors. It is a very conservative world in which they are not used to change” (9) • “Especially the cowboys in that solar panel world, huh? There are so many similar, self-proclaimed experts” (6) 	Reliability and trustworthiness of contractors and advisors
<ul style="list-style-type: none"> • "Where do I get the knowledge from? Because I am not tech-savvy. I have no substantive affinity with the subject at all” (5) • “We took a preparation phase of more than two years, to find out everything there is to know about this topic” (9) • “At the beginning of the process we felt quite insecure about the different steps to take. Therefore, we sought for a reliable and experienced contractor and advisory firm” (10) 	Lack of Information

Contextualizing the renovation

<i>Quotes</i>	<i>First order codes</i>
<ul style="list-style-type: none"> • “Only solar panels do not make a difference, but the whole in combination [...] indeed make a difference” (2) • “if you are going to make it more sustainable, it has to be a combination of everything” (12) • “Once we are in the process, we are going to do everything that is possible. Money does not play a role. If you refrain from for example roof insulation because you can no longer afford it, you are doing the wrong thing” (10) • “if you do it, I believe you have to do it right the first time, and start from the ground up” (11) 	Taking multiple steps/measurements at once
<ul style="list-style-type: none"> • It is an intrinsic motivation [...]. it is not money, because we will hardly get return on all those materials” (9) • “we will most likely not become richer from our investment, or even see any return on the investment. But for us that is not of importance” (10) • I am a bit disappointed by the discussion that it is all a calculation for return on investment. My biggest annoyance is at parties, about the ‘cost recovery period’”(2) 	Non-money related
<ul style="list-style-type: none"> • If I have to spent € 50,000 once to be energy neutral in my home and it is done, then we have to do that. (3) • We hired an architectural firm, advisory firm and a contractor to arrange everything (10) • “it is also important that I can find someone who can fix it who is reliable, without it having much effect on me” (1) 	Outsourcing of the activities

Overview of first-order codes, second order codes and aggregate dimensions

Motivational forces

<i>First order codes</i>	<i>Second order codes</i>	<i>Aggregate dimension</i>
Concern for future generations	Part of a greater cause	PB clients are aware of their privileged role, and want to be at the forefront of sustainability
Macro-economic situation		
Environmental aspects		
All small contributions count	Moral obligation as wealthy individual	
Taking the first step as wealthy individuals		
Comfortable living climate	Personal motives (pragmatical)	PB clients live large; they want to live in comfort and not worry about their financial and living situation
Future-proof house	Financial motives	
Reducing the living costs		

Impedimental forces

<i>First order codes</i>	<i>Second order codes</i>	<i>Aggregate dimension</i>
No necessity	Transaction costs	PB clients are most impeded with the effort it takes to research the various aspects related to the renovation
No trust in technology		
Lack of Information		
Finding contractors /advisors		
Aesthetically unpleasing	(lack of) visual appearance	
Patchwork of subsidies	Regulatory barriers	

Contextualizing the renovation

<i>First order codes</i>	<i>Second order codes</i>	<i>Aggregate dimension</i>
Taking multiple steps/measurements at once	Complete renovation	If PB clients decide to invest in Energy efficiency, they go all the way (Go big or go home/One-stop shopping)
Non-money related		
Future-proof house	Convenience	
Outsourcing of the activities		