



university of
 groningen

campus fryslân

Master Thesis

Sustainable Banking and Sustainable Living: How to incentivize the Private Sector towards Energy-Efficient Alternatives

Marta Carlesso

S4145917

University of Groningen | Campus Fryslân

Email: m.carlesso@student.rug.nl

ABSTRACT

Over the past years, people are becoming more concerned about social and environmental issues. Leaders in the financial services industry are promoting more energy-efficient practices and creating appropriate governance structures to appease shareholders and consumers. Banks integrate sustainability in their operations through innovative initiatives and offer specific products and services to customers and businesses to pursue environmental and social responsibility. These practices are defined by the term “*Sustainable Banking*”: the financial sector is moving towards sustainable operations, meaning that profit maximization is combined with social and environmental goals. This study outlines the role of the banking sector in incentivizing the private sector towards energy-efficient options, as exemplified by the construction industry. Banks are complex financial organizations but they can influence customers towards a sustainable energy transition.

Keywords: Sustainability, Sustainable Banking, Sustainable Living, Energy-Efficiency



INTRODUCTION

Social and environmental issues have initiated increased awareness about how to protect the planet, leading to the 1972 UN Conference on the Human Environment in Stockholm and the creation of the UNEP (United Nations Environmental Program). The WCED (World Commission on environmental and Development), also known as the Brundtland Commission, affirms that sustainable development ensures that humanity “*meets the needs of the present without compromising the ability of future generations to meet their own needs*” (WCED, 1987). Besides, the Paris Agreement in 2015 was signed by almost 200 countries, to keep the global temperature rise below two degrees Celsius (Vermeulen, Schets, Lohuis, Kölbl, Jansen, & Heeringa, 2018).

According to Bouma, Jeucken, Klinkers and Deloitte & Touche (2001), who introduced the concept of “*Sustainable Banking*”, various changes in the financial sector are moving banks in the direction of sustainability, thus requiring financial flows towards low-carbon technologies (Bouma, et al., 2018; Egli, Steffen, & Schmidt, 2018). “Sustainable Banking” is defined as a dynamic sector concerning human needs and the relations between banks and their stakeholders (Bouma, et al., 2001). The banking sector represents a demand for greater environmental and social responsibility as well as the discovery and creation of new business opportunities. Investors are considering sustainable business management that takes environmental, social, and governance (ESG) criteria into account. Hence, banks are capable of being sustainable while pursuing their profit-making activities (Carè, 2018).

In recent years, public and private organizations have started to prioritize sustainability. Leaders in the financial services industry are considering how to promote more energy-efficient practices, acknowledging the social and environmental impact of the industry, and creating appropriate governance structures to appease shareholders and consumers (Bouma, et al, 2001). Bouma, Jeucken, Klinkers, and Deloitte & Touche (2001) also argue that banks are integrating sustainability by supplying specific products and services to customers and businesses, such as green credit and mutual funds, loans with interest reduction, environmentally friendly mortgages, environmental loans of public banks, and microcredit funds (Weber, 2005). Thus, sustainability should be integrated into the business strategies and mission policy of the



financial sector (Weber, 2005; Bouma, et al., 2001). Building energy efficiency has occupied a prominent place on the agenda (Copiello & Bonifaci, 2015). Hence, this study will analyze how the banks can incentivize the energy transition for private sector customers, particularly in the construction industry.

For my research, I selected Rabobank as a business case to study sustainable business practices in the banking sector. Rabobank is a Dutch multinational banking and financial services company. It is considered a global leader in sustainability-oriented banking and it is the largest bank in the Netherlands for green savings, investments, and financing (Rabobank, 2020). Rabobank wants to be a supportive bank that is focused on long-term relationships that empower entrepreneurs to innovate their business model and customers towards sustainable investments (Rabobank, 2020).

For this project, qualitative analysis in the form of interviews is adopted, to understand how the banking sector is stimulating the private sector to transition to sustainable investments and innovation. Rabobank recognizes the responsibility and the market opportunities enhanced by financing in the durable energy transition and it aims to be part of a scalable platform for durable and sustainable energy, supporting with specific advice and network the customers who want to achieve energy savings in their households. Therefore, the bank can stimulate the private sector by offering them specific products and services, i.e. sustainable investment options, advice, and lending. Hence, the research addresses the following question: How can banks incentivize the private sector taking sustainable decisions in terms of energy-efficient usage?

Before trying to answer the Research Question, it is necessary to know how the banking sector is related to the energy sector and which type of actions financial institutions are considering to support their customers towards a sustainable transition. The research will firstly consider a theoretical background of sustainable banking investments and banking transition towards more sustainable sources. This will be followed by an explanation of the methodology used. Finally, the research will focus on the results reached, and the discussion on how practically a bank could implement its core performance with the benefit of sustainability.



THEORY

In this theoretical framework, I will first explain the term Sustainable Banking and its characteristics. Moreover, the importance of the Banking Private Sector and its transition towards sustainable energies and sustainable living will be highlighted. Finally, I will analyze the internal and external changes that a bank adopts to be considered sustainable.

Sustainable Banking

There exists a large gap between the current amount of green investments and what is required to lower the level of carbon emissions, as stated by the 2009 Copenhagen Conference (UNFCCC, 2009; Campiglio, 2016). The Prudential Regulation Authority (PRA) identified that 90% of banks do not consider the link between climate change and the bank's long-term financial impact. Banks should guarantee their balance sheets to be environmentally sustainable, making public any data they have on climate risks and supporting industry collaboration to develop innovative solutions against climate change (PRA, 2019). A transition to a low-carbon economy is a long-term process. However, energy transition risks can materialize in the short-term, creating short-run economic losses for businesses (Vermeulen, Schets, Luhuis, Kölbl, Jansen, & Heeringa, 2018).

Interest rates play a decisive role in determining renewable resources' competitiveness. It seems that the dynamics of financing conditions should receive more attention in models that include investments in low-carbon energy and, therefore, in Renewable Energy Technologies (RET) (Egli, et al., 2018). RET investments are long-term, and the finance industry usually avoids such long-term risks of new technologies without direct positive outcomes and benefits (Egli, et al., 2018), since risks to financial institutions and financial stability may arise (Vermeulen, et al., 2018). However, there is a growing awareness among financial institutions that sustainable investments bring financial risks, because of their long-term return, and simultaneously opportunities (Bouma, et al., 2001). Banks are aware of the knowledge of environmental and financial risks; hence they reduce the information asymmetry between market parties and offer specific products and services to the private sector, i.e. differentiating the interest rate, clients with a high environmental risk will pay a higher interest rate. This tariff differentiation stimulates the internalization of those costs related to environmental pollution (Bouma, et al., 2001).



Sustainable Living

Customers and businesses want to invest in targeting a more sustainable economy, e.g. achieve energy savings in their facilities. Many customers or companies that invest in a more sustainable home or business end up gathering the financial benefits of their efforts (Rabobank, 2020). Building energy efficiency has occupied a prominent place on the agenda (Copiello & Bonifaci, 2015). The Dutch National Energy Savings Fund in the Netherlands aims to speed up the growth of sustainable housing stock (Nationaal Energiebespaarfonds (NEF), 2017). Homeowners can receive loans, e.g. Energiebespaarlening (Energy Savings Loan), with attractive interest rates to make their home more energy-efficient. Moreover, Dutch companies can take out an Impactlending (Impact Loan), with low-interest rates provided by the European Investment Bank (Rabobank, 2020). Copiello and Bonifaci (2015) aim to compare additional costs of investment with the monetary savings achievable through reduced energy consumption. This would contribute to reconciling environmental and financial concerns; indeed, low capital intensity investments may turn out to be more effective from the environmental perspective and be also more profitable from the financial point of view (Copiello & Bonifaci, 2015). Banks should consider sustainability as a business opportunity (Weber, 2005). A bank should offer specific products and services, such as green credit and mutual funds, green loans with interest reduction, environmentally friendly mortgages, environmental loans of public banks, and microcredit funds. Thus, sustainability should be integrated into the business strategies of the financial sector (Weber, 2005).

In the field of sustainable living, financial institutions have a great influence on the private sector by identifying ways to modify or provide infrastructures or investments, which are compatible with requirements and parameters of sustainable development dimensions (Awuzie & Monyane, 2020). The construction and infrastructure industry have a reputation for negatively affecting the environment and society (Awuzie & Monyane, 2020). This is why sustainability-based criteria for planning are now available and there exist widely accepted indicators that measure actionable progress toward sustainability, incentives for practical implementation, and innovation systems (Awuzie & Monyane, 2020). However, to incentivize the private sector towards sustainable implementation in their assets, banks need to communicate clearly and concisely with all the stakeholders (Awuzie & Monyane, 2020).



It is interesting to notice that not only financial institutions are pushing towards more sustainable living conditions. The Dutch government offers Energy performance certificates (EPCs) for buildings that show the level of energy efficiency in physical assets. These certificates inform also about possible measures to take to save energy and are mandatory when new houses are offered for sale or rent (Government of the Netherlands, 2020). The most energy-efficient homes have an EPC rating of A, thus energy labels are used to classify the level of sustainability of a facility and its energy performance (Government of the Netherlands, 2020).

Climate Policies' Impact: Banks' required Internal and External Changes

To understand the sustainable impacts that financial institutions have, it is necessary to highlight both external and internal aspects that influence the bank's sustainable performance (Bouma, et al., 2001). Externally, the climate policies' impact on the banking sector is presented. Moreover, internally, the characteristics of the business processes within the bank are analyzed.

Many external aspects influencing the performance of banks are existing. In 2018, the parliament of the Netherlands proposed a climate law that targets a reduction in the greenhouse gas emissions of 95% by 2050, compared to the levels in 1990. The law stipulates that by the same year, all energy generation in the Netherlands should be carbon-neutral, having net emissions equal to zero (National Climate Agreement, 2019). The government is trying to boost sustainable energy production and find efficient and intelligent ways of using and saving energy. By 2023, the Netherlands also aims to make sustainable the 16% of all the energy used (Government of the Netherlands, 2020).

To meet the targets regarding energy and climate for 2030, EU Member States established a National Energy and Climate Plan (NECP) for the period from 2021 to 2030, which is introduced under the Regulation on the Governance of the energy union and climate action (EU/2018/1999) (European Union, 2018).

Central banks, regulators, and supervisors have been facing new challenges related to climate change. The physical, social and economic phenomenon is constantly changing and integrating

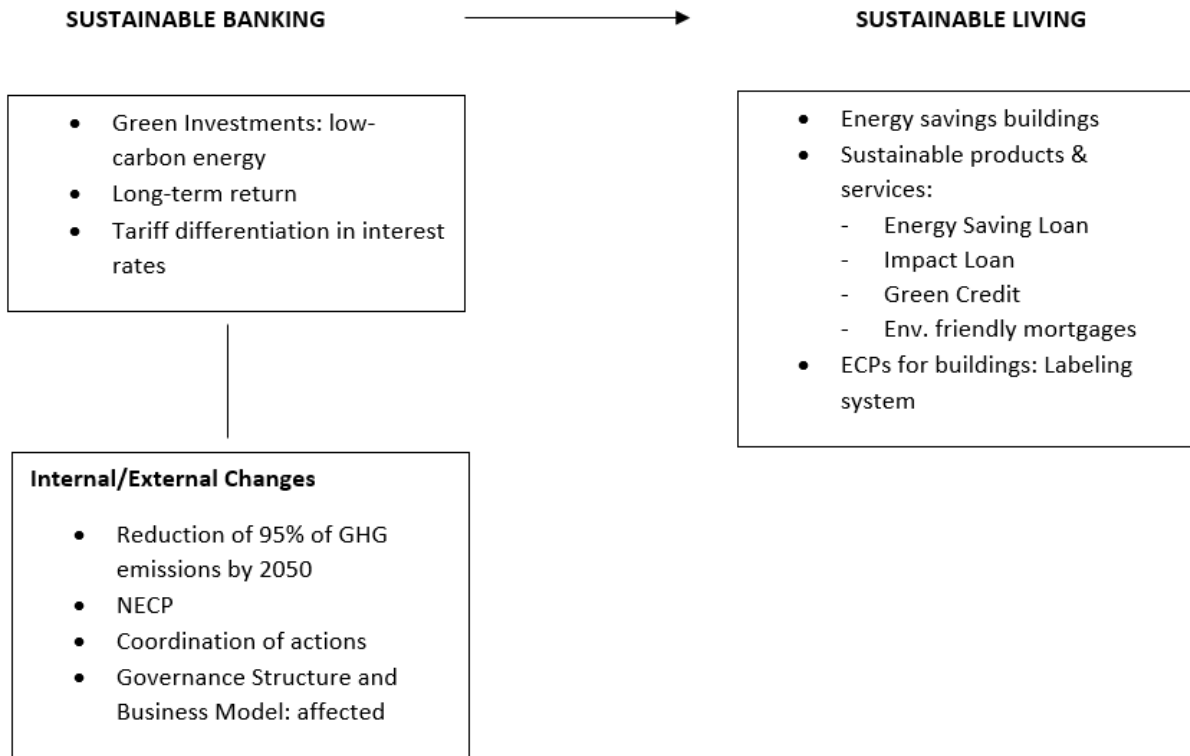


climate-related risks analysis into financial stability-monitoring is challenging, since it involves complex dynamics and chain reactions (Bolton, Despres, Pereira da Silva, Samama, & Svartzman, 2020). Indeed, it requires coordinating actions among many actors, including governments, the private sector, civil society, and the international community (Bolton, et al., 2020). In the absence of well-coordinated and structured climate policies, the stability of the financial sector may be affected by physical and transition risks (Bolton, et al., 2020). The development and improvement of forward-looking risk assessment and climate-related regulation would be necessary to preserve the financial and price stability (Bolton, et al., 2020). In other words, a smooth low-carbon transition requires the collaboration of different actors such as central banks, financial regulators, research communities, and financial market participants and the implementation of a comprehensive set of policies (Campiglio, Defermos, Monnin, Ryan-Collins, Schotten, & Tanaka, 2018).

Additionally, referring to internal aspects, banking organizations need to adapt to sustainable requests from its stakeholders (Bouma et al., 2001). This includes the existence of a governance structure within the bank that is aware of the importance of sustainability. Effective boards of directors are expected to promote sustainability (Jizi, Salama, Dixon, & Stratling, 2014). The board of directors is responsible for the development of business strategies and it takes the crucial decisions concerning sustainability (Jizi, et al., 2014). According to the WBCSD's Reporting Matters 2019 data, 40% of companies do not disclose board responsibilities on sustainability decision-making (WBCSD, 2019). Thus, the creation of a board-level committee responsible for sustainability insight might be a way for improving the governance and internal controls over sustainability issues (WBCSD, 2019).



Theoretical framework



Picture 1: Theoretical Framework

METHODOLOGY

In this study, to answer the research question on how a bank can influence the private sector to take sustainable energy-efficient decisions and collect the necessary data, a qualitative approach in the form of interviews has been adopted. In this study, a theoretical framework (Picture 1) for important concepts and definitions is presented to ensure a general understanding of the context under consideration.

For my analysis, I conducted a semi-structured interview study (Hennink, Hutter, & Bailey, 2011) within a Dutch bank, Rabobank. Interviews are verbal exchanges, also using technological devices, where the interviewer acquires information from the interviewee (Rowley, 2012). Rowley (2012) argues that semi-structured interviews can take different forms, the number of questions can vary and the question order can adapt to accommodate the interviewee. Semi-structured interviews are open so that new ideas can freely evolve during the interview (Rowley, 2012). This aspect was particularly important and necessary for this



research, to better understand the role of sustainability in the banking sector. Following an abduction approach (Tavory & Timmermans, 2014; Alvesson & Kärreman, 2007), this research considers data and existing theory in tandem and uses interviews to collect valuable data. In the methodology section, I will highlight the importance of planning and designing research interviews, conducting research interviews, and making sense of the data collected (Rowley, 2012), always considering the importance of coherence, transparency, impact, and trustworthiness of the research. Kirk and Miller (2011) argue the importance of objectivity in qualitative research, thus, the risk of being demonstrably wrong. The objectivity is evaluated in terms of the reliability and validity of the observations. "Reliability" is the extent to which a measurement procedure will have the same result if the study methodology is followed. This is why all steps involved in this research are fully explained in this section. "Validity" is the correctness of the study. To achieve the validity of the interviews, I asked specific questions about the organization's initiatives, practices, values, and actions to each interviewee (Kirk & Miller, 2011).

Data collection

For this research, I conducted eight semi-structured interviews with employees from different departments of Rabobank in the North of the Netherlands. The employees interviewed have relatively high positions within the bank, such as directors, financial advisors, and managers. Most of the interviewees are directly involved in sustainability projects and deal with the general governance within Rabobank. Their specific role can be seen in *see Appendix A*, where each interviewee was given a respondent number.

The interviews were held in April and in May 2020. Before the interviews, I planned an interview guide (*see Appendix B*) with a set of around 10 questions, considering both general and sub-questions, to ensure that the interviewee explores the main questions sufficiently (Rowley, 2012). The questions asked in the interviews followed a logical order (Hennink, et al., 2011), with some flexibility (Rowley, 2012). This would guide the interviewee towards what the aim of the research is and avoid bias in potential situations. Interviews were held via call, depending on the availability and preference of the interviewee and their duration was around 30 minutes on average. Two of the eight people interviewed asked me to send them the questions via email so that they would have felt more comfortable in contributing to my



research using a foreign language. In general, interviews require permission to conduct the research and to establish an initial rapport with the population studied (Hennink, et al., 2011). A Consent Form (*see Appendix C*) has been signed by the interviewees and the interviewer to prove their willingness to be interviewed and the awareness of being recorded for transcription purposes only, according to business ethics standards (Polonsky, 1998). To reduce interviewer bias, respondents were free to participate and withdraw at any time, until when the data analysis officially started. The researcher signed a form sent by the financial institution (Rabobank), to ensure confidentiality and non-disclosure of information (Gioia, Corley, & Hamilton, 2012). The researcher affirms to carefully follow the instructions given when carrying out the work assigned. Moreover, I am required to properly represent the interests of the banks and to maintain strict confidentiality concerning all data and matters regarding the bank and its staff members. Any material collected from the interview, such as audio-recorded data, written notes, consent forms, and interview transcriptions are securely stored in the PC of the interviewer, to avoid any kind of data transmissibility and fraud (Bryman, 2008).

Data analysis

For this study, the data collected from the interviews have been analyzed following a specific procedure. After conducting the interviews, each interview has been carefully transcribed with the use of recordings operated with technological devices (Rowley, 2012) (*see Appendix D*). The interviews were transcribed using the Intelligent Verbatim Transcription, according to which the transcriber corrects sentences, grammar, and irrelevant words of the normal conversation (Scribbr, 2020). For every interview, each transcript has been analyzed and coded first in Microsoft Word and then in Excel (Ruona, 2005). As a coding method, I used the “open coding” approach (Strauss, 1990) because it was considered a valid method to outline the general vision of the research. Each code was labeled and categorized in a general structure framework and to avoid any kind of bias and data familiarization, each interview was coded twice in different and relatively distant periods. Completed transcripts were sent to the interviewees, to allow them to correct and approve the transcript (Rowley, 2012).

To avoid bias against the results among interviewees, potentially related to misunderstanding of the interview questions, triangulation research was applied. Triangulation of data combines data from different sources and different times (Flick, Kardorff, & Steinke, 2004) and, in this



research, data were additionally collected from the bank's available documents and reports, and the official website. Credible interpretation of data helps to have conclusions that are defensible and plausible (Gioia, Corley, & Hamilton, 2012). This research links theory to practice (Tavory & Timmermans, 2014) and tries to properly answer the research question posed in the *Introduction* section about how banks incentivize the private sector taking sustainable decisions in terms of energy-efficient usage.

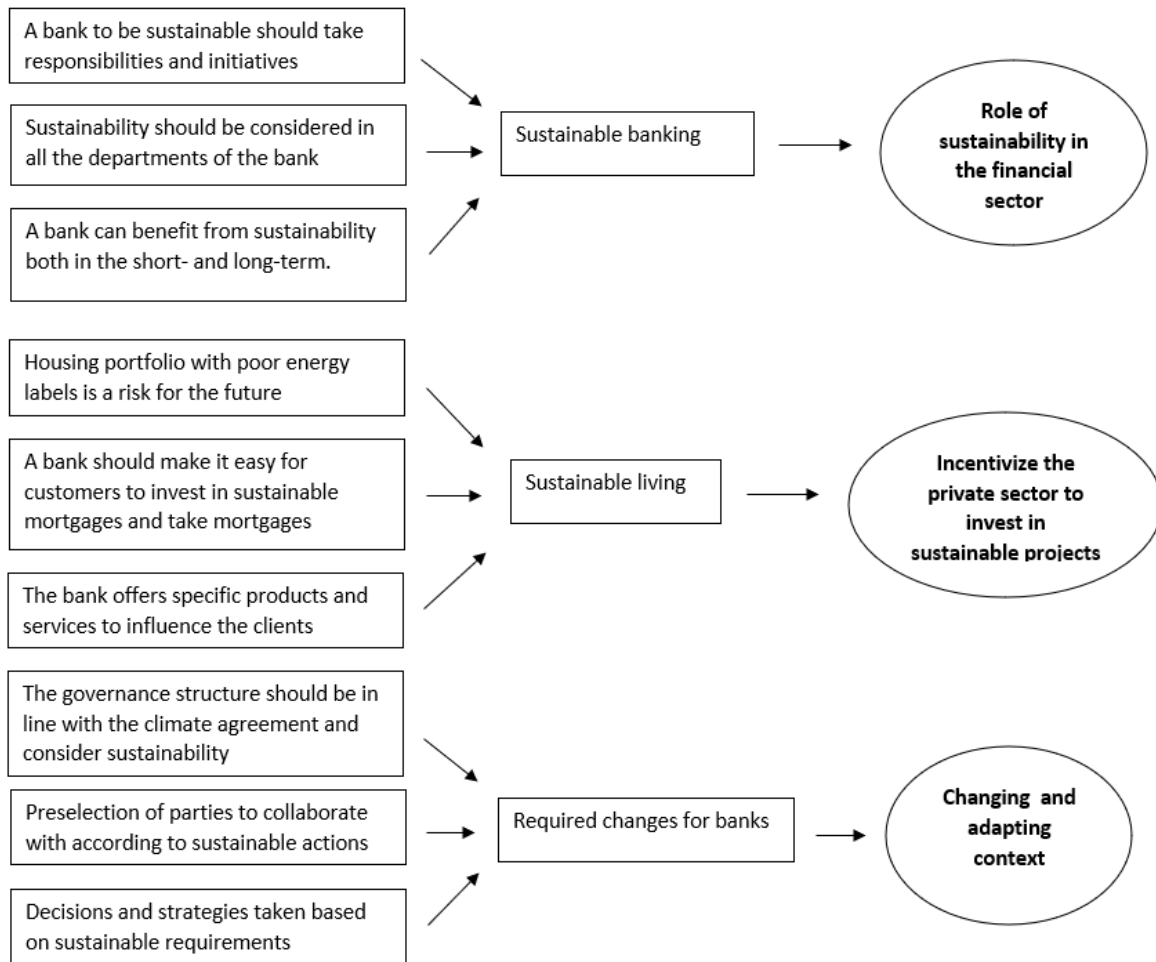
RESULTS

After the interviews held with some employees of Rabobank, many insights and points of reflection have been provided. The Coding Tree created and the framework (*see Picture 2 and 3*) give the structure followed in the *Results* section of this research, where I will outline and discuss the results collected through the interviews, once coded and analyzed. In general, I will highlight how banks influence the private sector to make sustainable decisions and the required changes needed within the bank to translate a financial institution towards an identity that cares about environmental aspects, in addition to the economic ones. Firstly, I will explain the information collected about the topic of Sustainable Banking and Sustainable Living, summarized in *Table 1 (see Appendix E)*. Secondly, I will focus more on how the governance structure and the business model of the bank would be affected. Moreover, the benefits of a scalable platform for renewable energy will be discussed. Lastly, all this contextual information will be compared and analyzed considering the historical time we are currently living in, known as the Corona Crisis, and some possible solutions to overcome economic stagnation, caused by the pandemic, will be provided.

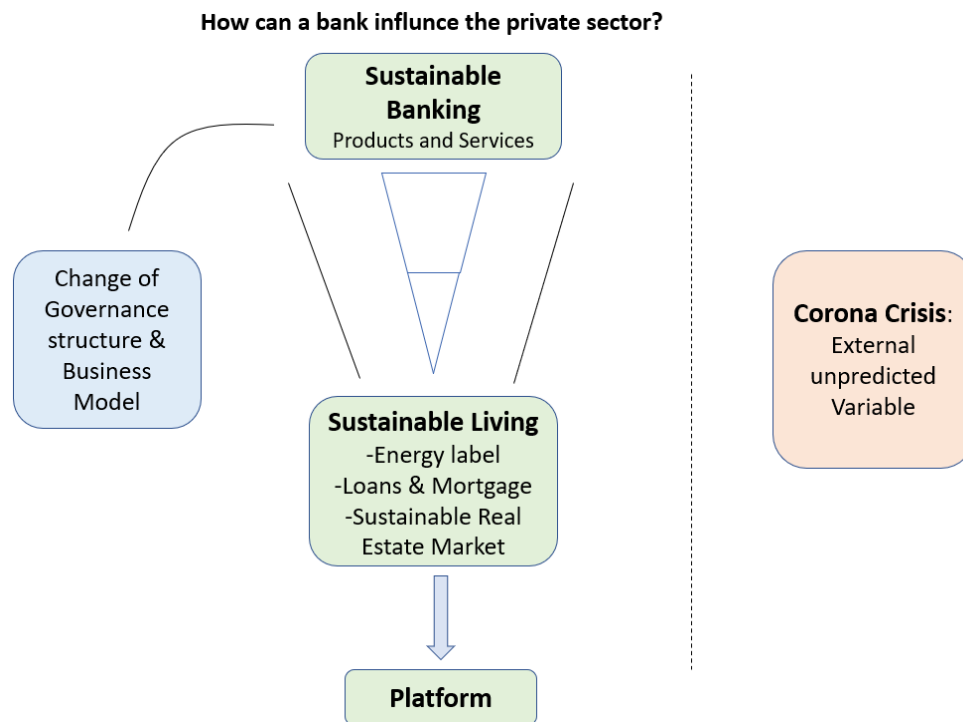
To compare the different findings from each interview, I used a General Code Tree (*see Picture 2*), created using the concepts from theory and data collected from the interviews, following the methodology explained by Gioia, Corley, and Hamilton, (2012). It displays first-, second-, and third-order theoretical codes. In the General Code Tree, the first-order codes are the concepts analyzed directly from the interviews. Second-order codes are linked to theory and the general theme is visible. Lastly, the third-order codes are the aggregate dimensions and the



added value of the study. This structure was possible after interpretation and reflection on how codes are linked and patterns of data.



Picture 2: Coding Tree Interviews



Picture 3: Road map / Results

Sustainable Banking

The evidence of rising global temperatures and a growing awareness of climate change has been leading to an increase in effective international action, such as the Paris Agreement (Vermeulen, Schets, Lohuis, Kölbl, Jansen, & Heeringa, 2018). From the interviews held, it is evident that the Paris Agreement and its goals are considered from financial institutions in the Netherlands and that sustainability is a topic highly discussed within both the private and the public sectors. Specifically, Rabobank endorses the sustainable goals of the Paris Agreement and has a direct role in the fight against climate change, advising its customers to make sustainable decisions. Rabobank aligns all its activities according to the UN SDGs (Sustainable Development Goals) as a guiding framework, with the intent to accelerate the energy transition and lower the CO₂ footprint (Rabobank Annual Report, 2019). From the interviews it results that the mission of Rabobank is “*Growing a better world together*”, meaning that the goal is to make a valuable contribution to the well-being and prosperity of the community (Rabobank Annual Report, 2019). Being in the front line for sustainable transitions, Rabobank contributed



to the establishment of the Dutch National Climate Agreement and endorsed the Climate Commitment (Rabobank Annual Report, 2019).

One interviewee affirms that financial institutions seem to start considering sustainability for both fulfilling a social duty and pure self-interests (1), since in this way the bank can offer more services and products to the private sector (1;3;4;5;6;7,8) such as the Green Loan for green investments and the Impact Loan with discounts on interest rates available for sustainable leaders, thus, companies with a high level of sustainable efficiency and investment portfolio. In fact, *“we have some products that stimulate our customers to embrace sustainability”* (6). A bank can benefit from sustainability both in the short-term, by offering and providing more loans, and in the long-term, by building a healthy mortgage portfolio and image. Giving more finances and considering sustainable investments in their portfolio, banks earn more interest and differentiate themselves from other financial institutions. Respondent 7 argues that offering sustainable investments the bank can *“differentiate from other banks and attract customers [...] But more and more banks are doing the same so differentiation may not be so easy”*.

To be sustainable, banks need to take responsibility and initiatives and integrate social and environmental aspects in all their departments. Sustainability and circularity need to become central topics and, for this reason, affiliation with many local initiatives and collaboration with sustainable companies is necessary (3;5;8). In particular, Rabobank is collaborating with *GreenHome* for sustainable living, a company based in Amsterdam, to make it as easy as possible for homeowners to have sustainable housing. In this way, the bank can provide independent information and advice. *GreenHome* works with many partners, mostly related to construction and installation projects. One interviewee argued that *“GreenHome advises about everything, customers do not have to expect from our employees that they are energy advisors. It is not our role in Rabobank. Rabobank is an advisor about mortgages and how to get a loan”* (2). This means that collaboration among different parties is essential.

It seems that companies investing in sustainability, innovation, and circularity, thus, in sustainable business models, might have a better future perspective. As an example, to enhance sustainability, Rabobank wants to appoint two advisers deployed in the area of sustainability and circularity (3). These specialized consultants will help customers, and the private sector in general, to make their company or homes more sustainable. Sustainability is a business



opportunity, also because it enhances the motivation of employees (5). Providing a good inclusive working environment for the employees, people would enjoy going to work and they would help the customers to make the most efficient decisions. This is beneficial also for the bank itself since the strategy would be positively affected.

Sustainable Living

Sustainability-based criteria for planning have been implemented; indeed, widely accepted indicators that measure actionable progress toward sustainability, incentives for practical implementation, and innovation systems are now available (Awuzie & Monyane, 2020).

From the analysis of this research, it seems that Rabobank contributes to national climate objectives and encourages the private sector in the Netherlands to make their infrastructures more sustainable. This is because buildings with poor energy labels create negative impacts on the environment and society (1). Hence, financial institutions can advise the private sector to consider the long-term financial benefits of investing in sustainable decisions. Banks make it as easy as possible for customers to take mortgages and invest in sustainable housing in the form of installations in houses, solar panels, good insulation, efficient energy, and gas consumption (2;8). One interviewee affirms that the bank gives *“advice and influence the clients. We give [customers] solutions to make households sustainable and we offer them specific products”* (7).

By stimulating customers to consider sustainability in their houses, the goal is to transform real estate assets towards zero impact or energy neutral by 2050. Benefits for the private sector itself can be seen in fewer property costs, less dependency on external providers (i.e. electricity, petrol), increasing the long-term value of the house, and the less scarcity of raw materials, which, therefore, would be cheaper to buy (4;7;8). However, to purchase a facility or demand a loan, there are obligations and requirements that the bank is expecting from the private sector (6). For instance, energy labels play an important role in ranking the current and future value of a house (1;2;4;6;8). The labeling system guarantees a standardized way to select sustainable housings from unsustainable ones, and the more environmentally friendly a house is, the closer to an A-Label it would be classified. Rabobank ensures that the bank might discontinue any



type of collaboration with clients that are in the lowest sustainability category, thus Label D, and customers that are unwilling to incentivize their sustainable operations and investments. Hence, the customers comply with social and environmental obligations, i.e. guarantee that the whole supply chain of the private sector follows minimum rules for social conditions. Moreover, the bank preselects its clients considering if they observe environmental standards (Rabobank Annual Report, 2019). This means that the private sector must comply with the bank's Sustainability Policy and respect a set of fixed criteria related to sustainability to be supported by the banking institution. In this way, the bank is offering banking solutions to clients who want to make their businesses or houses more sustainable. They would be more aware of the new opportunities offered by the transition to a low carbon economy and of their possibility to grow a sustainable finance portfolio.

Internal required Changes: Business Model and Governance Structure

Rabobank is a cooperative bank, and therefore, aims to make long-term contributions for itself and the private sector. Being a customer-driven bank, Rabobank actively involves all the interested parties, creating a network. From the interviews of this study, it results that sustainability is a core value for Rabobank and the goal is to incentivize it among the private sector. To do so, sustainability should be considered in the whole internal organization and the governance structure of the bank. Indeed, from the interviews, it is argued that *“sustainability must be woven into the organization”* (1) and that *“sustainability must not be a separate subject from Rabobank and its governance structure”* (1).

According to the majority of the interviewees (1;2;4;5;7;8), the governance structure is facing a sustainable transition, and the business model of the bank is also affected by sustainable performances, to offer new choices and advice to customers. In this case, the departments will all consider sustainability as a priority, and everyone would operate following the same goals. Banks would probably preselect the parties to collaborate with, according to sustainable requirements and obligations.

The board of directors might consider the need for new functions and vacancies related to sustainability and in the field of innovation. The managing board is, therefore, responsible for climate change and has to be aware of climate-related risks and opportunities that the bank itself and the private sector have to deal with. Their role is to find new strategies to respond to



climate changes (Rabobank Annual Report, 2019). On the contrary, some interviewees argued that the structure and the business model within the bank will not have any radical change, but only new decisions and strategies would be adopted. The two different points of view are clarified in *Table 2*.

Internal required Changes	Governance Structure	Business Model
Description & Quotation: Sustainability requires changes	<i>Sustainability must be considered in the whole organization and governance structure (1;5;7)</i>	<i>By selling solar panels and give energy advice, the business model can be affected (7)</i>
	<i>The governance structure will be in line with the climate agreement (Paris Agreement). The board wants to make a difference in terms of sustainability and discuss about it with clients (2)</i>	<i>In the long-term, new business models will have a positive effect on the life-cycle of companies (3)</i>
	<i>The team I am part in sustainable living, or the business department or the risk department now are all separate, but I think it will be consolidated in the future. Sustainability will be considered in all the departments (8)</i>	<i>The business model may be affected: in a mortgage we consider the current value and the capacity of the house (4)</i>
	<i>Sustainability is more integrated in the governance and there are new functions and jobs in the field of innovation and sustainability (4)</i>	<i>Need of investing in the current possibilities with existing houses and this would imply a change in the business model (4)</i>
Description & Quotation: Sustainability does not require any change	<i>Our bank already opted for sustainability and circularity, so, I do not think the current governance structure will change (3)</i>	<i>The business model will not be affected. I do not see any reason (6)</i>



<i>Maybe there will be one extra manager responsible for sustainability but not a real change of the governance (6)</i>	<i>The business model will not change, only decisions, choices and strategies of financial institutions (5)</i>
---	---

Table 2: Required changes in the governance structure and business model | Results

In Table 2, the main opinions of the interviewee concerning a change in business model or governance structure considering sustainability are presented. It results that respondents 1, 2, 4, 5, 7, 8 agree that the governance structure will be affected and that a change is required. All the departments within the bank need to become more sustainable and sustainability should be considered by every single employee within the bank. New vacancies related to circularity and innovation are more and more requested and this affect the whole governance structure.

On the other side, respondent 3 affirms that the bank “already opted for sustainability and circularity” and that the current governance structure will not be affected. Respondent 6 argues that not a real change of the governance is necessary and that “maybe there will be one extra manager responsible for sustainability”. Moreover, from respondents 3, 4, 7, 8 it is clear that the business model of the bank requires to adapt and change, while respondents 5 affirms that there is no reason to modify it because “only decisions, choices and strategies will be different”.

Global Scale Platform

The creation of a scale platform for renewable energy and sustainability options might be a valuable new approach to create economies of scale and share knowledge transparently and easily (4;5;6;7). Therefore, it would incentivize the private sector to invest in energy-efficiency alternatives, and help private customers and businesses to consider sustainable options. In Table 3, it is possible to see the main quotes of the interviewees related to the scale platform, on which the following results are based.

The platform could be created for exchanging information and advising the private sector on specific sustainable investments to make (2;7;8). It may prepare the customers for a sustainable



and financially healthy future, considering financial well-being and more sustainable living. Such a platform would work if all financial institutions are collaborating (in the case of the Netherlands: ING, Rabobank, ABN Amro, ASN Bank, etc.) so that different types of information about how to transit towards sustainable sources and investments are available (2). In this way, it becomes easier for customers to finance their investments in sustainable housing since they would have the parties to contact with and the steps to take to implement their sustainable project. Additionally, a platform could inform customers on what is the best procedure for their specific personal situation and help them to know their financial return in the long-term. It would also inform about possible subsidies available and the likelihood to obtain a loan or a mortgage (4;5;8). Besides, the platform must match efficiently local supply and demand (3;4) because, for example, solar energy and wind energy are not always optimally used, since during the night less energy that was generated during the day is required. Moreover, a scale platform focused on a specific area would benefit the banking sector. Indeed, banks would operate also in the sustainable market (3) since the private sector is becoming more and more aware of its relevance. Thus, it would be easier for banks to offer services and find their customers.

All the interviewees argue that a platform needs to have specific characteristics, i.e. be open-source and share data transparently. Additionally, it needs to be independent, well-known from all potential users, easy to work with, and unique (i.e. the existence of one single platform for sustainable investments and not of several types) (4;5;6).

However, respondents 2 and 7 argue that such a platform presents several problems: first, it is challenging to connect all the stakeholders interested in sustainable supply and demand. Moreover, being used by many different parties, it would be difficult to make connections and “*people would just talk*” (7). This means that few transactions might happen and the role and profits of the banking sector would be uncertain.

Partnering and collaborating with other parties could be a valuable opportunity to actively share the knowledge gained. In this way, there would be more awareness about responsible economic performances and also small-scale producers might understand the benefits of a more sustainable approach. For all the relevant stakeholders (e.g. NGO’s, investors, financial companies etc.) transparency might be particularly necessary. Thus, adopting a scale platform,



the private sector would easily understand the sustainable investments available and better differentiate the sustainable investment portfolio, based on personal needs.

Scale Platform

Advantages

A platform may create support, economy of scale and share of knowledge (1)

Different types of information about sustainability would be available (2;7)

It enables customers to finance their investments easily and to have network, i.e. Parties to contact for help and possible subsidies (8)

Beneficial also for banks since stimulate the sustainable market (8)

Guide the private sector to personal sustainable investments and clear understanding of the possible returns (8)

Initiatives to coordinate supply and demand of green energy (3; 4)

Source of data; currently not many information available (4)

The platform would stimulate and incentivize sustainability (5)

Disadvantages

It works only if everybody, including all financial institution, is collaborating (2)

Difficulty in connecting all the interested stakeholders. Few transactions happening (2; 7)

Characteristics

Openness, offer of any type of information concerning sustainability (1; 2; 4; 6; 7; 8)

Transparency, open-source, independent, well-known from potential users (4; 5; 6)



*Offer supply and demand on a local base to connect local companies
(3; 4)*

Table 3: *Quotes about Scale platform | Results*

Corona Crisis and Sustainability

In recent months, we are facing a challenging time due to COVID-19, also known as Coronavirus. All sectors have been negatively affected and both the private and the public sectors are trying to understand the direction to take and new opportunities available to overcome the crisis that the virus is causing. This research tries to understand whether companies consider sustainability as a possible and potential solution to solve both the climate and the financial crisis we are experiencing.

From the majority of the interviews held, it results clear that the virus makes people forget about the importance of sustainability, even if everyone is aware of the importance it has been playing in the last few years, due to a higher level of climate concern. Interviewees argue that “a bank has to survive” (2;5;6) and in Corona times “people need to have short-term solutions” (2). As a result of the crisis, many companies and private individuals are now becoming less solvent. Since there is less money available, investing in sustainability and circularity does not result in a priority. Once overcome this challenging time, some interviewees affirm that this crisis might have a positive effect on sustainability (2;3;8). Companies and individuals are nowadays thinking on how to become less dependent on external parties. The banking sector should think along with entrepreneurs and private individuals, so that the speed towards a sustainable transition would be higher. From the interviews (3;5) it is affirmed that the path towards sustainability is just postponed or delayed so that now the private sectors and entrepreneurs are not asked for paying additional costs related to sustainable projects. After this time, companies might become more sustainable if they are also supported by the government to do so. However, this would be more valid for big companies than medium or small size companies, since they have a higher margin in revenues. Besides, some interviewees (3;5) highlight the benefits that this Corona crisis has on the environment; due to the lockdown, most of the people are currently working from home and there is a high possibility that, in the future, workers will become used to this new working



approach. This is why future construction projects would probably consider the inclusion of space to work from home.

DISCUSSION

In this section, a conclusion of the main results is provided. Afterward, potential recommendations for financial institutions and the limitations of the current study are described. Additionally, future research on how the banking sector could consider sustainability and overcome the Corona crisis is presented. Good advice to customers, products, digital convenience, and innovation services are offered by Rabobank as requirements for being a leading bank (Rabobank, 2020). Hence, the banking sector incentivizes the private sector towards sustainable choices. This section would be able to contribute to answer the research question of this study that states: How can banks incentivize the private sector taking sustainable decisions in terms of energy-efficient usage?

Conclusions

In general, failing investing in sustainable products and services could prove detrimental not only to the bank's profitability but also to its credibility. Financial institutions play a crucial role in promoting sustainable development and influence the private sector in their sustainable investments decisions. In the field of sustainable living, financial institutions guide clients to adapt their choices to the requirements and parameters of sustainable development dimensions (Awuzie & Monyane, 2020).

This study considers the concept of sustainable banking not only related to the bank's practices and operations, but also it highlights how the activities of financial institutions are related to sustainability also in other sectors, i.e. energy and construction field. Homes with sustainable features have many advantages such as lower energy bills, higher comfort in living, and benefits for the environment (Awuzie & Monyane, 2020; Copiello & Bonifaci, 2015). Rabobank is collaborating with *GreenHome* to make it as easy as possible for homeowners to have sustainable housing. In this way, the bank can provide independent information and advice. *GreenHome* works with many partners mostly related to construction and installation



projects, and Rabobank is collaborating in offering Green mortgages and Loans to customers willing to invest in sustainable homes. The projects provided are guaranteeing that homes are well insulated, preventing the heat from leaking unnecessarily, and properly ventilated, maintaining an optimal indoor climate that benefits the owner's health.

To accelerate the energy transition (Vermeulen, Schets, Luhuis, Kölbl, Jansen, & Heeringa, 2018), Rabobank is launching various initiatives to make sustainable living accessible to everyone, mostly related to mortgage consultation. According to the Annual Report 2019, 10% of clients took measures to consume energy efficiently when taking out a new mortgage (Rabobank, 2020), implementing the bank's mortgage portfolio. Many sustainable financial measures are available, such as the Rabo Groendepot (green construction deposit account), in which money is stored for housing energy-savings. Thus, green finance helps accelerate the private sector towards sustainable transitions by offering new services and products. An example might be the Impact Loan, offered to companies with a meaningful sustainability label (Rabobank, 2020). In this research there is evidence that sustainability increases the value of a house and the comfort of living. In the past few years, it has become easier to borrow money if invested in a sustainable project, e.g. energy savings budget in the mortgage and the energy savings loan.

In general, the EU Member States established a national energy and climate plan (NECP) for the period from 2021 to 2030. This is introduced under the Regulation on the Governance of the energy union and climate action (EU/2018/1999) (European Union, 2018). At the moment, the EU seems to remain committed to sustainable growth and meets the targets regarding energy and climate, planned to be reached by 2030. Investors must know that in the long-term they would be able to get better returns on their investments, for example investing in clean energy in their households.

According to the authors who introduced the concept of "*Sustainable Banking*" (Bouma, Jeucken, Klinkers, and Deloitte & Touche, 2001), after the crisis in 2008, the financial sector started considering sustainability and financial flows towards low-carbon technologies took place (Bouma, et al., 2018; Egli, Steffen, & Schmidt, 2018). Lenders can help firms during economic crises and times of recessions (Beck, 2020; Beck, Degryse, & Van Horen, 2018; Bolton, Freixas, Gambacorta, & Mistrulli, 2016). Currently, we are facing the Corona Crisis,



which has been challenging the financial sector (Beck, 2020). In current times, it is necessary to look ahead and predict how the pandemic and the global recovery might impact sustainable development. Communities and institutions need to plan and adapt to new needs and implement the economy by considering sustainable features. Nowadays, people are traveling less and production processes are disrupted. A short-term reduction in greenhouse gas (GHG) emissions is, therefore, expected. However, the risk is that, once we overcome this crisis, people will start producing and consuming more than before.

Contrary to my expectations, it results that aligning the banking performance with sustainability during this period of crisis is not a priority, since, currently, the private sector expects to have profits in the short-term. As one interviewee affirms: *“Fortunately, it is a delay and not a cancellation”*. Before the Corona crisis, according to the Association of HomeOwners (Vereniging Eigen Huis, 2020), 27% of homeowners were willing to become more sustainable. However, after a couple of months, this percentage dropped to 17%, since the private sector is postponing the investment.

The current crisis should be perceived as an opportunity to stimulate consumers and citizens to adopt more sustainable habits, enhancing lasting changes on how to produce and consume. Companies should perform and see sustainable projects as potential opportunities (Grove & Clouse, 2018) and integrate them into their policies, strategies, products, services, and processes (Weber, 2005). Global corporations and small and medium-sized enterprises have been developing creative, innovative, and effective solutions to overcome the challenges arising from the existing crisis.

In conclusion, banks are complex financial organizations. However, it seems that they are trying to play a role towards a sustainable transition, both internally, changing their governance structure and business models, and externally, creating network and incentivizing their clients to invest in a sustainable portfolio. As the CEO of Rabobank Leeuwarden Nord-West Friesland once argued, *“many banks talk the talk but does not walk the walk. Now it is time to act”*. This means that even if difficulties on the way are encountered, sustainability for banks is an aspect worth to be considered.



Recommendations

This research not only contributes to theory but also to practice. Rabobank is realizing that the introduction of online tools to help clients achieve their financial goals is finding traction. A potential opportunity to consider might be a local or even global scale platform for renewable energies where banks and the interested stakeholders can connect. A transparent and open-source platform would accelerate the sustainable energy transition and make sustainable living accessible to everyone.

This research argues the importance of taking a different approach on how to create value, with a focus on the medium- and long-term results. This means that a change of perspective and a managerial shift might be necessary (Grove & Clouse, 2018); a new approach of governance would require the board to act aligning the interests, expectations, and needs of the company with those of all material stakeholders, meaning that the value created for the company is directly linked to the value created for others. A diversified board might help the company to be more competitive in the market, more agile, and sustainable. A robust governance structure that accomplishes successful management of sustainability within the company requires clear directions and committed leadership. Commitment begins at the top and flexibility and adaptation are needed to advance the sustainability agenda. A way that can be used to integrate sustainability in the corporate's board is to establish executive remuneration incentives based on environmental and/or social factors (Berrone, & Gomez-Mejia, 2009).

After the crisis caused by COVID-19, medium- and longer-term planning is needed to balance and re-energize the economy. Previous studies affirm that an ecosystem that encourages entrepreneurship is necessary and, therefore, robust and sustainable business models might flourish (Nicola, et al., 2020), as most of the interviews of this research also suggest.

Limitations

Currently, the Corona situation is affecting businesses and our daily life. For this study, eight employees working in Rabobank were interviewed. Some people did not accept participating in the research because of their additional commitments caused by the Corona crisis. Having a limited amount of information and people working in the same bank, it is clear that the data collected cannot be generalized and considered valid for the whole financial sector. Moreover,



a focus on Dutch policies and governmental support has been analyzed and, therefore, to adopt this study for financial institutions outside the Netherlands, a different approach might be necessary. A qualitative study was adopted and much quantitative information regarding the bank might be missing. An implementation of the study using a quantitative methodology could, therefore, be interesting and extend the findings to wider populations (Ochieng, 2009).

To code the interviews, Word and Excel were used (Ruona, 2005), meaning that no coding software was adopted. Additionally, another limitation might refer to the coding process, since, even if the interviews were coded twice in different periods, the same person analyzed the data. Personal judgments, feelings, and ideas from both parties might have influenced the results (Polonsky, 1998). Other aspects, such as ambiguities in human language, previous studies, and cultural backgrounds might affect the findings and the conclusions of the study (Ochieng, 2009).

Future research

The global pandemic causes disruption and financial uncertainty that has a direct impact on businesses and the lives of many clients (Rabobank, 2020). Banks and other types of financial institutions continue supporting the private sector with knowledge and appropriate financial instruments. In this way, banks will contribute to some of the 17 United Nations Sustainable Development Goals and have a meaningful positive impact. Further research might better consider the effects of the unpredicted external variable, thus, Coronavirus, directly on the banking sector and on private sustainable living investments. The answer given to the research question on how the banking sector can influence the private sector towards energy-efficient alternatives could, therefore, be additionally analyzed and implemented.



REFERENCES

- Alvesson, M., & Kärreman, D. 2007. Constructing mystery: empirical matters in theory development. *The Academy of Management Review*, 32(4): 1265–1281.
- Awuzie, B., & Monyane, T. 2020. Conceptualizing Sustainability Governance Implementation for Infrastructure Delivery Systems in Developing Countries: Success Factors. *Sustainability*, 12(3): 961. <https://doi.org/10.3390/su12030961>
- Baraldi, D. 2019. World Economic Forum. Accessed online <https://www.weforum.org/agenda/2019/09/how-banks-can-be-more-sustainable/>. Viewed February 14, 2020.
- Battiston, S., Mandel, A., Monasterolo, I., Schuetze, F., & Visentin, G. 2016. A Climate Stress-Test of the Financial System. *SSRN Electronic Journal*. doi: 10.2139/ssrn.2726076.
- Beck, T. 2020. *Economics in the Time of COVID-19. Finance in the times of coronavirus*. CEPR Press, 2020.
- Beck, T., Degryse, H., Van Horen, N. 2018. When arm’s length is too far: Relationship banking over the credit cycle. *Journal of Financial Economics*. 127(1):174-196.
- Berrone, P., & Gomez-Mejia, L. R. 2009. Environmental performance and executive compensation: an integrated agency-institutional perspective. *The Academy of Management Journal*, 52(1): 103–126.
- Bolton, P., Despres, M., Pereira da Silva, L., Svartzman, R., & Samama, F. 2020. The green swan. Central banking and financial stability in the age of climate change. *Bank for International Settlements*.
- Bolton, P., Freixas, X., Gambacorta, L., Mistrulli, P. E. 2016. Relationship and Transaction Lending in a Crisis. *Review of Financial Studies*. 29(10): 2643-2676.
- Bouma, J., Jeucken, M., Klinkers, L., & Deloitte & Touche. 2001. *Sustainable banking: The greening of finance*. Sheffield, U.K.: Greenleaf Pub.



- Bryman, A. 2008. *Social research methods*. Oxford: Oxford University Press
- Campiglio, E. 2016. Beyond carbon pricing: The role of banking and monetary policy in financing the transition to a low-carbon economy. *Ecological Economics*, 121: 220-230. doi:10.1016/j.ecolecon.2015.03.020.
- Campiglio, E., Dafermos, Y., Monnin, P., Ryan-Collins, J., Schotten, G., & Tanaka, M. 2018. Climate change challenges for central banks and financial regulators. *Nature Climate Change*, 8(6): 462-468. doi:10.1038/s41558-018-0175-0.
- Carè, R. 2018. Sustainable banking: Issues and challenges (Palgrave pivot). Cham: *Palgrave Macmillan*. doi:10.1007/978-3-319-73389-0.
- Copiello, S., & Bonifaci, P. 2015. Green housing: Toward a new energy efficiency paradox? *Cities*, 49: 76-87.
- Egli, F., Steffen, B., & Schmidt, T. 2018. A dynamic analysis of financing conditions for renewable energy technologies. *Nature Energy*, 3(12): 1084-1092. doi: 10.1038/s41560-018-0277-y.
- Flick, U., Kardorff, E. von, & Steinke, I. 2004. *A companion to qualitative research*. Sage Publications.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. 2013. Seeking qualitative rigor in inductive research: notes on the Gioia methodology. *Organizational Research Methods*, 16(1): 15–31. <https://doi.org/10.1177/1094428112452151>
- Government of the Netherlands. 2019. National Climate Agreement. The Hague. Accessed online <https://www.klimaataakkoord.nl/documenten/publicaties/2019/06/28/national-climate-agreement-the-netherlands>. Viewed February 17, 2020.
- Government of the Netherlands. 2020. Accessed online <https://www.government.nl/>. Viewed May 11, 2020.
- GreenHome. 2020. Accessed online <https://greenhome.nl/>. Viewed May 07, 2020.



- Grove, H., & Clouse, M. (2018). Focusing on sustainability to strengthen corporate governance. *Corporate Governance and Sustainability Review*, 2(2): 38-47. <https://doi.org/10.22495/cgsrv2i2p4>
- Hennink, M., Hutter, I., & Bailey, A. 2011. *Qualitative Research Methods*. London: SAGE.
- Jizi, M. I., Salama, A., Dixon, R., & Stratling, R. 2014. Corporate governance and corporate social responsibility disclosure: evidence from the us banking sector. *Journal of Business Ethics*, 125(4): 601-615.
- Kern, F., & Smith, A. 2008. Restructuring energy systems for sustainability? Energy transition policy in the Netherlands. *Energy Policy*, 36(11): 4093-4103. doi: 10.1016/j.enpol.2008.06.018.
- Kirk, J., & Miller, M. L. 1986. *Reliability and validity in qualitative research* (Ser. Qualitative research methods, v. 1). Sage Publications.
- Leichenko, R., O'Brien, K., & Solecki, W. 2010. Climate Change and the Global Financial Crisis: A Case of Double Exposure. *Annals Of The Association Of American Geographers*, 100(4): 963-972. <https://doi.org/10.1080/00045608.2010.497340>.
- National Climate Agreement. 2019. Government of the Netherlands. Accessed online <https://www.government.nl/documents/reports/2019/06/28/climate-agreement>. Viewed March 17, 2020.
- Nationaal Energiebespaarfonds (National Energy Saving Fund, NEF). 2017. Accessed online <https://www.energiebespaarlening.nl/wp-content/uploads/2017/12/Investment-Regulations-Energy-Saving-Loan.pdf>. Viewed February 29, 2020.
- Network for Greening the Financial System (NGFS). 2019. Accessed online <https://www.bundesbank.de/en/bundesbank/green-finance/network-for-greening-the-financial-system-808978>. Viewed February 23, 2020.



- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., ... Agha, R. 2020. The socio-economic implications of the coronavirus pandemic (covid-19): a review. *International Journal of Surgery* (London, England), 78: 185–193.
- Ochieng, P. A. 2009. An analysis of the strengths and limitation of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century*, 13:13.
- Official Journal of the European Union. 2018. Document L:2018:328:TOC. Accessed online <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:328:TOC>. Viewed February 23, 2020.
- Polonsky, M. J. 1998. Incorporating Ethics into Business Students' Research Projects: A Process Approach. *Journal of Business Ethics*, 17: 1227-1241.
- PRA. 2019. Accessed online <https://www.bankofengland.co.uk/knowledgebank/what-is-the-prudential-regulation-authority-pra>. Viewed February 25, 2020.
- Rabobank. 2019. Annual Report 2018. Accessed online <https://www.rabobank.com/en/images/annual-report-2018.pdf>. Viewed February 14, 2020.
- Rabobank. 2020. Annual Report 2019. Accessed online <https://www.rabobank.com/en/images/annual-report-2019.pdf>. Viewed May 07, 2020.
- Rabobank. 2020. Accessed online <https://www.rabobank.com/en/about-rabobank/in-society/sustainability/index.html>. Viewed February 14, 2020.
- Rabobank. 2020. Accessed online <https://www.rabobank.com/en/about-rabobank/in-society/sustainability/for-individual-clients/index.html>. Viewed February 29, 2020.
- Rabobank. 2020. Accessed online <https://www.rabobank.com/en/about-rabobank/in-society/sustainability/articles/2016/rabobank-discusses-sustainability-with-a-growing-number-of-customers.html>. Viewed February 29, 2020.



- Rowley, J. 2012. Conducting research interviews. *Management Research Review*, 35(3/4): 260-271. doi:10.1108/01409171211210154.
- Ruona, W. E. A. 2005. Analyzing Qualitative Data, in Holton, E. F. and Swanson, R. A. (eds) *Research In Organizations: Foundations And Methods In Inquiry*. San Francisco: *Berrett-Koehler Publishers*, n.d.: 233–263.
- Scribbr. 2020. Transcribing an interview in 5 steps. Accessed online <https://www.scribbr.com/methodology/transcribe-interview/>. Viewed May 06, 2020.
- Stigson, B. 2004. Making the link between environmental performance and shareholder value: the metrics of eco-efficiency, *World Business Council for Sustainable Development*, Switzerland.
- Strauss, A. L. 1990. Systematic coding in qualitative research. *Bms: Bulletin of Sociological Methodology / Bulletin De Méthodologie Sociologique*, 27(27): 52–62.
- Tavory, I., & Timmermans, S. 2014. *Abductive analysis: Theorizing qualitative research*. Chicago: University of Chicago Press.
- UNEP. 1972. Accessed online <https://www.unenvironment.org/>. Viewed February 13, 2020.
- UNFCCC. 2009. Report of the Conference of the Parties on its Fifteenth Session.
- VEH. 2020. Accessed online <https://www.eigenhuis.nl/#/>. Viewed May 13, 2020.
- Vermeulen, R., Schets, E., Lohuis, M., Kölbl, B., Jansen, D., & Heeringa, W. 2018. An energy transition risk stress test for the financial system of the Netherlands. *De Nederlandsche Bank N.V.* Eurosystem. Occasional studies. Volume 16-7.
- WBCSD. 2019. Reporting Matters. Accessed online <https://www.wbcd.org/Programs/Redefining-Value/External-Disclosure/Reporting-matters/Resources/Reporting-matters-2019>. Viewed May 05, 2020.
- WBCSD. 2019. The state of corporate governance in the era of sustainability risks and opportunities. Accessed online <https://docs.wbcd.org/2019/03/WBCSD->



The state of corporate governance in the era of sustainability risks and opportunities.
.pdf. Viewed May 05, 2020.

WCED (World Commission on Environment and Development). 1987. Our Common Future.
United Nations.

Weber, O. 2012. Environmental credit risk management in banks and financial service
institutions. *Business Strategy and the Environment*, 21(4): 248–263.

Weber, O. 2005. Sustainability benchmarking of European banks and financial service
organizations. *Corporate Social Responsibility and Environmental Management*,
12(2): 73-87. doi:10.1002/csr.77



APPENDIX

APPENDIX A: Interviews' information | Methodology section

Date & Time	Role of the interviewee	Duration
29.04.2020 -	<i>Respondent 1:</i> Financial advisor specialized in the field of "sustainable living". Temporarily worked as a "product manager" sustainable living at Rabobank Nederland.	Questions shared via email
28.04.2020 h. 14:00	<i>Respondent 2:</i> Mortgage advisor. Last year he had a role at the headquarter of Rabobank. He was in the role of management in sustainable housing and his goal was to help people give more advice with sustainable investments.	39 min
29.04.2020 -	<i>Respondent 3:</i> Director of a large corporation for Friesland. He is also involved in stimulating sustainability (circular economy) and innovation within Rabobank (Friesland). He is also the point of contact for Rabobank Nederland in the field of Large Corporate.	Questions shared via email
28.04.2020 h. 15:30	<i>Respondent 4:</i> Manager for the mortgages department, around 25 people who are active as advisors in finding people who are buying and selling homes.	27 min
29.04.2020 h. 10:00	<i>Respondent 5:</i> Relationship manager for the bigger clients in Friesland.	28 min
28.04.2020 h. 10:00	<i>Respondent 6:</i> Account Manager for relatively small businesses. He is responsible for companies with finance levels of 3 million euros. He is responsible for 60-70 clients of the bank so he is the contact person, especially about finance items.	26 min
30.04.2020 h. 10:00	<i>Respondent 7:</i> Director of the department of clients in a local bank in Heerenveen.	19 min
01.05.2020 h. 10:00	<i>Respondent 8:</i> She is a product manager sustainable living for regional customers. She is responsible for maintaining products and developing new products or services for sustainable living.	23 min



APPENDIX B: Interview guide

Research Question: How can banks help the private sector take sustainable decisions in terms of energy-efficient usage?

Thank you for participating in my research. This is a great opportunity for me to get to know better how the financial sector works in terms of sustainable actions and practices. The purpose of this research is to analyze how banks can help the private sector take sustainable energy-efficient decisions. I am aware of non-disclosing any type of private information of the bank during and after my collaboration. In case it is requested by the interviewee, the person interviewed and the answers will remain anonymous.

My name is Marta Carlesso and I am a master student of Sustainable Entrepreneurship at the University of Groningen. I want to remind that the interview will be recorded for quality and transcription purposes only. After the interview, I will send you the transcription for final approval, before using the interview for my research. Specific information can be found in the Consent Form sent you before the interview.

Interview Questions:

1. Can you please tell me your role at Rabobank?
2. What do you feel are the core values of Rabobank?
3. What role does sustainability play at Rabobank?
4. According to your own experience, how can a bank take sustainability into account?
5. Why do you think financial institutions may consider sustainability in their agenda?
6. How do you think a bank can influence the private sector towards sustainable decisions?
7. According to you, how can a bank benefit from offering sustainable choices to the private sector?
8. How do you think a sustainable transition would impact the governance structure in Rabobank?
 - a. How will the business model be affected?



9. One of the ideas of the banking sector towards sustainability is to create a global scale platform for renewable energy. How do you think this could benefit the private sector? And the banking sector?
10. Nowadays, we are facing the Corona crisis. A solution to this may be the “Green Recovery”. How do you think this may impact the financial sector?

APPENDIX C: Consent Form

Dear Interviewee,

You are invited to take part in an interview to implement my Master Degree Final Project (SEP) at the Master of Sustainable Entrepreneurship at the University of Groningen. The purpose of this interview is to identify how the financial sector can help the private sector, thus customers and businesses, to make sustainable energy-efficient choices. This interview will remain, if requested personally by the interviewee, anonymous. If you wish your name would not be disclosed, you may inform me at any time. This consent form will not be disclosed to any other parties not mentioned herewith.

By consenting to this interview, you agree the following:

1. I understand that I voluntarily agree to participate in this research.
2. I am aware that I can participate at the interviewee and at any time withdraw or refuse to answer some questions without consequences of any kind.
3. The goal of this research is to conduct a qualitative study, with the goal of understanding the contribution of the financial sector to make their private customers and businesses more energy-efficient.
4. For the purpose of conducting the study, the interview will be recorded, transcribed and analyzed. The interview will not be used for any other types of purposes.
5. The recordings will be used for transcription purposes only and afterwards will be deleted.
6. The final transcription of the interview will be sent to you for final approval, before including it in the research.



7. You may withdraw this consent before 12th May 2020, when the research data analysis will commence.

APPENDIX D: Transcript Interviews

Transcript Interview A

1. *Can you please tell me your role at Rabobank?*

I am a financial advisor, specialized in the field of "sustainable living". In addition, he temporarily worked as a "product manager" sustainable living at Rabobank Nederland.

2. *What do you feel are the core values of Rabobank?*

Growing a better world together. In my opinion, the core values in the field of sustainability are professional, knowing what is financially possible in this area, but also knowing financing outside the bank, such as sustainability loans and subsidy options. In addition, discuss this topic in every relevant customer conversation. So even if the customer does not bring this up, so being focused on the customer interest instead of bank interest.

3. *What role does sustainability play at Rabobank?*

Sustainability plays a very important role within Rabobank. I am proud that we are at the forefront of this in relation to other financial institutions. Rabobank is a reflection of society. This means that some of the employees are not yet aware of sustainability. But the company and policy are sustainable.

4. *According to your own experience, how can a bank take sustainability into account?*

Take responsibility. This means being the first one and taking initiative. Customers demonstrate why this is necessary by focusing mainly on benefits and removing objections. Customers struggle with the difficulty and hassle. To be solved by working with implementing parties and other relevant parties. In addition, the bank will have to integrate it into their services. Sustainability is not a separate subject but must be considered in all departments. Not only in a standalone department.

5. *Why do you think financial institutions may consider sustainability in their agenda?*



It is a social duty. But also, self-interest. Housing portfolio with poor energy labels is a risk in the future. In addition, it offers opportunities to provide more loans.

6. How do you think a bank can influence the private sector towards sustainable decisions?

Very much. Many people are already aware of this topic. Only it is often forgotten at logical moments, such as the purchase of a home. People already have a lot on their mind. In addition, a bank can point people to the financial advantage. It turns out that financial benefit is often a motive to make sustainable decisions.

7. According to you, how can a bank benefit from offering sustainable choices to the private sector?

In a short-term thinking, providing more loans. But also, distinctive. In long-term thinking, building a healthy mortgage portfolio and image.

8. How do you think a sustainable transition would impact the governance structure in Rabobank? How will the business model be affected?

Sustainability must be woven into the organization; sustainability must not be a separate subject from Rabobank and its governance structure. Commercial and doing the right thing must be combined.

One of the ideas of the banking sector towards sustainability is to create a global scale platform for renewable energy. How do you think this could benefit the private sector? And the banking sector?

It will create support. It is often an objection that results from the Netherlands do not matter on a global scale. Economies of scale will be interesting. And sharing knowledge.

9. Nowadays, we are facing the Corona crisis. A solution to this may be the “Green Recovery”. How do you think this may impact the financial sector?

What do you mean by green recovery? Corona makes people forget about sustainability more quickly. The focus is now elsewhere. It is important to continue to prioritize.



Transcript Interview B

1. *What is your role in Rabobank?*

I am a mortgage advisor. This is what I do now but last year I had a role at the headquarter of Rabobank. I was in the role of management in sustainable housing and my goal was to help people give more advice with sustainable investments.

2. *What are the core values of Rabobank also in terms of sustainability?*

Rabobank is more than just a regular bank and tries to do something extra for clients, also locally. Rabobank is really involved in climate change for housing advice etc. There is a change on how Rabobank sees mortgage advice for sustainable housing. The climate agreement and future goals in the NL is important and now it is unique to discuss sustainability with clients. We endorse the sustainable goals of the Paris agreement and therefore Rabobank has a role in this climate agreement and tries to advise its customers.

3. *What may financial institutions consider in their sustainable agenda? And what kind of services or products may be offered to incentivize sustainability?*

This is a concept far from people and from the mortgage housing sector. Therefore, we need to make it as easy as possible for our customers to understand what is the climate agreement and the effects and make it easy for them to finance investments (installations in houses...) and take a step forward. We make it easy for them to take the right choices and invest in sustainable housing and take a mortgage. For example, we collaborate with *Greenhome*, a company in Amsterdam. They operate in the sustainable housing sector. They deal with sustainable labels and you can understand how to make the house more sustainable. In every mortgage advice, we suggest our customer Greenhome, so it is a connection with them. Greenhome advises about everything, customers do not have to expect from our employees that they are energy advisors. It is not our role in Rabobank. Rabobank is an advisor about mortgages and how to get a loan. Therefore, we ask Greenhome how Rabobank can invest for example 10.000 € in the best ways.

4. *If the bank incentivizes the private sector towards sustainable choices, how can the bank itself benefit?*

In two ways. One is if you finance more, you earn more interest rate. But for sustainability it is not the main goal to earn more. If you work in the sustainable sector, you create a sustainable



balance from the bank and a long-term profit. Sustainable houses are beneficial for the bank; it is better for the bank to have all the houses in an A label than D label. So, for a bank it is better to invest in houses with a high energy level for financial reasons. A side effect is a better image to the outside world about the bank. People see Rabobank as a Green bank. But in this case, the sustainable value in homes is necessary for financial reasons and have this sustainable investment in the portfolio.

5. *How a sustainable transition would impact the governance structure in Rabobank?*

It has an impact on the board for example. The structure may change to be in line with the climate agreement. In general, from my experience, the board wants to make a difference in terms of sustainability. They are open-minded for sustainability and they want to discuss it with clients. In Rabobank it is expected to consider sustainability in every position. They really want to be as green as possible. I think that it is not possible to move on without sustainability.

6. *Creation of a global scale platform for renewable energy. How can this benefit the banking sector and the private sector?*

A platform can work if everybody is collaborating in it, and for everybody I mean all finance companies like Rabobank, ING, ABN Amro, then it will work. There is a need for different kinds of information. It could be a way to make all the NL more sustainable. But connecting all the stakeholders may be really difficult.

7. *We are facing the corona crisis. What about using sustainability to overcome the crisis?*

I doubt it. For a bank it is to survive. I think in the corona crisis people need some short-term solution, to get over three months and start over. The Corona crisis may have a positive effect on sustainability. I think people, customers and stakeholders can make more sustainable choices but not the banking sector.

Transcript Interview C

1. *Can you please tell me your role at Rabobank?*

I am a director of a large corporation for Friesland. Our portfolio consists of companies with a financing of more than € 3 million or a turnover of at least € 10 million. We do not serve agricultural customers. I am also involved in stimulating sustainability (circular economy) and



innovation within Rabobank (Friesland). I am also the point of contact for Rabobank Nederland in the field of Large Corporate.

2. *What do you feel are the core values of Rabobank?*

In the context of your research, this is “growing a better world together”. For me personally, that is “helping entrepreneurs grow sustainably”. Making companies more and better future-proof. Sustainability and circularity play an essential role here. Many companies are on the right track, but the supply chains are not yet aligned. This means that we do not get the most out of circularity, for example.

3. *What role does sustainability play at Rabobank?*

Rabobank focuses on sustainability and circularity. As Rabobank Friesland, we are at the forefront and are seen as an example for the rest of the organization. We are affiliated with many initiatives in this area (Friesland). We also encourage sustainable and circular initiatives. For example, by financing new sustainable business models or financing investments that are used to make the company more sustainable. We do this because we are convinced that companies that invest in sustainability, innovation and circularity have a better future perspective than companies that do not. This is good for these companies and the bank. As a result, fewer companies are getting into trouble and fewer companies are going bankrupt. At the end of 2020, we will appoint two advisers who will be fully deployed in the areas of sustainability and circularity. These consultants will actively help customers to make their company more sustainable. They become the bank's specialists in the field of sustainability and circularity. In this way we can help entrepreneurs even better and make our portfolio more future-proof.

4. *According to your own experience, how can a bank take sustainability into account?*

We try to facilitate entrepreneurs. In addition to providing financing, we share knowledge and make our network available.

5. *Why do you think financial institutions may consider sustainability in their agenda?*



Fortunately, all banks already have this. Rabobank is a frontrunner and we have to keep it that way. As mentioned earlier, the banks become stronger as their customers become more sustainable and circular. It is even our social role as a banker to give substance to this.

6. How do you think a bank can influence the private sector towards sustainable decisions?

I am active on the corporate side of the bank. But I am sure that what I have indicated earlier, also applies to private individuals. By providing financing, knowledge and making our network available, private customers can become more sustainable. The many choices of sustainability do not make things easier for the consumer. We can help them to make the right choices. By making your home more sustainable, it becomes more valuable and you can benefit from lower financing rates.

7. According to you, how can a bank benefit from offering sustainable choices to the private sector?

This gives us the opportunity to make our invested funds (loans) and guarantee more sustainable. In addition, new financing options are emerging for the bank. This is good for the customer and the bank. This also creates a sustainable business model for the bank. Continuing the old way is finite.

8. How do you think a sustainable transition would impact the governance structure in Rabobank? How will the business model be affected?

Since Rabobank has already clearly opted for sustainability and circularity, I don't think this will affect the current governance structure. However, more and more choices will be made from the perspective of sustainability and circularity. There will come a time when we no longer want to finance traditional business models and that we all want to finance certain homes if they are immediately made sustainable. In the very long term, I think the bank will have fewer credit losses. I believe that the new business models will have a positive effect on the life cycle of companies. This will also become visible with private financing. Families are becoming less and less dependent on energy suppliers (electricity/petrol). Raw materials will also become less scarce in the long term, and therefore cheaper, because products will become circular.



9. *One of the ideas of the banking sector towards sustainability is to create a global scale platform for renewable energy. How do you think this could benefit the private sector? And the banking sector?*

You can already see this emerging at a local level. Companies that provide each other with residual flows (heat/cooling/energy). In addition, there are initiatives to coordinate the supply and demand of green energy. Solar energy and wind energy are not optimally used at the local level, because at night less energy is required that is generated during the day, while wind energy is generated 24 hours a day. By better matching supply and demand, many companies and individuals can benefit from this. Do not forget the effect on the environment.

10. *Nowadays, we are facing the Corona crisis. A solution to this may be the “Green Recovery”. How do you think this may impact the financial sector?*

Personally, I think that many companies and individuals are now thinking about how they can become less dependent on others during a crisis. Sustainability is an important element in this. Unfortunately, as a result of the crisis, many companies and private individuals are now becoming less solvent. Applies to extra investments in sustainability and circularity is less money available. The road to a sustainable society is delayed. Governments postpone sustainability wherever possible. This is to avoid burdening entrepreneurs and private individuals with additional costs. Fortunately, it is a delay and not a cancellation. We as a bank must continue to think along with entrepreneurs and private individuals, so that we can increase the speed of this important transition wherever possible.

Transcript Interview D

1. *What is your role in Rabobank?*

I am a manager for the mortgages department, around 25 people who are active as advisors in finding people who are buying and selling homes.

2. *What are the core values of Rabobank, also in terms of sustainability?*

We defined our values as a company as a whole. We want to stimulate a better and growing world together. We assure that everybody is financially healthy and that it is possible for everybody to have affordable living, according to the sustainable goals.



3. *How do you think the bank can take sustainability into account? Why may financial institutions consider sustainability in their agenda?*

Rabobank has a social development agreement from the UN and we also want to support the goals of the Paris agreement. We want to transform the real estate in the NL to more efficient and maybe even with zero impact by the end of 2050. We try to support this, stimulate, seduce our customers to have the best in their homes, to make sure that they are considering sustainability in their homes. In relation to the labeling system of energy labels, if a house has a high positive impact on insulation, consuming gas and energy it may have an A label. In the mortgages you assure that the house has a good label, then you get a discount on the interest rate because of the long-term value of the house. For loans and mortgages, we need the value of the house to be stable over the years. Mortgages in the NL are for max 30 years and then you have to pay back the mortgage. We try to seduce customers by investing in having a good label to have an influence in the interest rate. So, you pay less for a long time.

4. *How can a bank benefit from offering sustainable choices to the private sector?*

We always try to comply with the goals we agreed upon. People that are living more self-sufficient, they have lower property costs, and they are not or less depending for example on gas providers. The NL has no gas anymore and we need to buy it from Russia and therefore we do not know how the price will be in 30 years. People are becoming financially healthy when they are in better homes. Then, the value of a mortgage is depending on the value of the home. In the long-term, homes that are not sustainable are losing their value quicker. Politics might eventually intervene.

5. *How a sustainable transition would impact the governance structure within Rabobank?*

In governance there are more and more new types of functions and jobs, to monitor and stimulate the way people deal with those issues and challenges that we face as a company. Sustainability is becoming more and more integrated in our governance and in the long-term we might even see a change fully with the development of sustainable financing. The mortgages that we advise might have a life of 30 years, which is already 2050, which is when we need to have sustainable housing in the NL. We need to think about what we do when it comes to giving a mortgage on a home. Also, the business model of the bank will be affected because in my department, for example, there are two things that you need to get a mortgage,



that is the value of the home (we cannot give a mortgage any higher than the current value of the home) and secondly we determine what is the capacity right now. These are figures that we look at. The value of houses does not only go up but they need investments, to stimulate the transformation towards sustainable housing. Therefore, we need to change our business models to monitor what will be the impact of decreasing quality of our business, because it might end up that we have mortgages in the end. So, we need to see the possibilities that we have now with existing housing.

6. *What do you think about the creation of a global scale platform for renewable energy?*

Platforms are created or existing on an international scale. To put labels in the NL is quite an investment. It may be a way to share ideas and connect experiences. When it comes to improving existing homes there is not enough data that shows that the long-term effect of insulation or better-quality windows. So, the platform may also be a source of data. The businesses may benefit from such a platform to offer services or to find the customer in the end. So, open-source and shared data, because investments need to be feasible in order to be done. Home owners only pay when in the end it is profitable for them. In the platform it may be interesting to see also the supply and demand on a local base in order to connect with local companies.

7. *Do you think that the Corona Crisis we are facing may be overcome with the use of sustainability?*

We try to support everybody in the financial situation. We were not expecting such a scenario and we see that people with little financial offer or savings are more resilient in this situation. People who are financially independent are healthier even during the corona crisis. People with high property costs, that take even 70/75/80% of their income go straight to the fixed monthly costs. Everybody is working from home and not everybody has working stations. Maybe people are thinking about the time they spend in the car and in the future, this may be considered also in the housing structure, where offices maybe in homes will be created.



Transcript Interview E

1. *What is your role in Rabobank?*

I am a relationship manager for the bigger clients in Friesland.

2. *What are the core values of Rabobank also in relation to sustainability?*

Rabobank is trying to be a frontrunner with sustainability. It is helpful for the sustainability of the world but it is also a business opportunity. It is smart to consider it; it helps in the motivation of the employees and then sustainable companies we presume they have better results than companies that are just reacting to what the government is describing.

3. *How the bank can take sustainability into account and why financial institutions may consider sustainability in their agenda?*

Because we are an important rater in the whole triangle and when the bank is financing investments it can influence others' decisions to make more sustainable choices. The bank can also not finance unsustainable projects. For example, the interest rates are lower when sustainability is considered. So, clients may be involved in these types of decisions.

4. *What kind of products or services can a bank offer to enhance sustainability?*

We can let the loan be paid in a shorter time when it is not sustainable and in a longer time when it is. When a bank discusses the projects of the clients, it can affect their decisions.

5. *How can a bank benefit from sustainable choices of the private sector?*

We can benefit from it positively. For the motivation of the staff or because of long-term benefit of sustainable investments. For example, how much it is worth when you have to sell it; in general, it is worth more when it is sustainable. And the people who are aware of sustainability are front leaders in thinking, so they can assume they are maybe better in making good choices and therefore having less chance of failure.

6. *How can a bank influence the private sector to make sustainable decisions?*

Mostly the private sector is motivated from its wallet. We motivate them to invest in sustainable investments, like making the house sustainable and make it energy neutral. When they do it, they get the best rates and they also get the possibility to lend more money.



7. *How do you think that a sustainable transition within the bank would impact the governance structure of Rabobank?*

In Utrecht, where the direction is sited, they are making choices of employing people in the field of innovation or in the sustainable departments. So, they are making those choices. And with the investments and the choices we make, the role of sustainability is important. Therefore, I think also the governance is affected.

8. *And what about the business model? Will it be affected also?*

Generally, the business model will be the same. It changes only how to make choices and the strategy you are following. So, only decisions will be different.

9. *One of the ideas of the banking sector towards sustainability is to create a global scale platform for renewable energy. How do you think this could benefit the private sector? And the banking sector?*

It may be profitable for the consumers and companies; we can therefore stimulate it for incentivizing sustainability but I do not know what the role of the banking sector may be. Such a platform has to be independent, well-known from all potential users and it should be easy to work with. It has to be unique.

10. *To overcome the corona crisis, would it be necessary to consider sustainability for banks?*

What is important for companies and the private sector is to survive. Only in comfortable situations can you take choices. A lot of investments are cancelled or delayed at this moment, choices with sustainability are maybe not so considered. In a normal situation sustainability may come back at the same level as where we were. But at this moment I think that companies are considering only surviving motives. Because of the lockdown we had advantages for the environment. It is an advantage in the disadvantage. We need money to pay the bills etc. so sustainability is not discussed now. On the long-term may be beneficial because people are travelling less and everyone is working from home. When everything is back to normality, I think more people will be working from home so that is an advantage for the planet. And maybe companies will relate more with local suppliers and not only search for the cheap products in China for example, having again an advantage for the environment.



Transcript Interview F

1. *Can you please tell me your role in Rabobank?*

I am an Account Manager for relatively small businesses. I am responsible for companies with finance levels until 3 million euros. I am responsible for 60-70 clients of our bank so I am the contact person, especially about finance items.

2. *What do you feel the core values of Rabobank are?*

We are a cooperative. We are there for our members of the corporation. Our core mission is growing a better world. It implies that sustainability is really important.

3. *What is the role of sustainability in Rabobank?*

It is important for all companies to survive in the long-run. It is a practical thing, if they do not do that they will not survive. The Corona crisis has an impact on that, maybe in a negative way. When companies have financial problems, it is all about surviving and making a profit to survive. Also, the pressure from outside problems is less now, possibly, I am not sure. There are incentives for the private sector to make sustainable decisions. We have some products that stimulate our customers to enforce sustainability. We have the Impact loan, which is a loan for sustainable users. You can have discounts on the interest rates and it is available for what we call the sustainable leaders (instead of users). We also have the Green Loan which is available to our clients and it faces green investments for our clients but on the other hand there are also measures. When a client, a customer in commercial real estate who rents out buildings (and wants a loan for those buildings) is interested in buying a property to rent, the property has to have certain energy labels. There are some obligations and requirements on the type of investments. If they want to buy a building for renting and have finance from Rabobank, we demand that it has only an A or B label. So, it has two sides.

4. *Before you mentioned the Corona crisis that we are facing. Media and News are speaking about “Green Recovery” to overcome the crisis, considering sustainability. Would it be the same for the financial sector?*

Rabobank, I think, will not change. But I think it will be an important thing within the banking/financial sector. The companies you mentioned that's because the big companies can have some support from the government but they can only get it if they are more sustainable.



So, that is because those are requirements from the government. It is hard to predict. If a company is getting in trouble and the consumers have less money to spend, I am afraid that it has a bad influence on sustainability. Maybe I am negative, I hope it is not true but I do not think that the financial sector will be less or more occupied with sustainability after the Corona Crisis. I do not think it will change a lot. With the companies we are working with, small-medium enterprises, I do not think so. Maybe large companies because they are forced by the government to be greener. Then the bank can maybe benefit. But the companies I am working with, smaller companies, with finance level 3 million turnover, I am afraid it will be less important than before the Corona Crisis.

5. *Do you think that a sustainable transition would impact the governance structure in Rabobank?*

I do not see any reason. That means who is responsible within the organization. Maybe there will be one extra manager responsible for sustainability but not a real change of the governance. The business model will not change either.

6. *About the creation of the Global scale platform where stakeholders can connect each other. What are the benefits for the banking sector and for the private sector?*

I do not know about this platform. It sounds like a good plan. The company can benefit in that case because knowledge is concentrated. For the private sector you can share knowledge and it is easier to make contacts that can help with your ideas. I think it can give an incentive towards sustainability. That is a possibility. And for the banking sector, if you are the first bank to participate in it or to develop such a platform it can connect to a lot of businesses.

7. *What would be some important elements for building such a platform?*

It has to be transparent and easy to make contacts, open.

Transcript Interview G

1. *What is your role in Rabobank?*

I am a principal of the department of clients in a local bank in Heerenveen.

2. *What do you think are the core values of Rabobank also in terms of sustainability?*



We are a cooperative bank, so we are a bank for business clients. We want to make the world a little better in the NL and abroad. We make households financials and general wellbeing.

3. How can a bank take sustainability into account?

We can give advice to our clients and influence them. We can give them solutions to make households sustainable and we can give some products. We have to make our clients take sustainable decisions.

4. What kind of products or services a bank can offer to the private sector to become more sustainable?

We can decrease our rates. Moreover, we can be energy advisors and for example make the clients buy solar panels for housings.

5. What are the benefits for a bank to offer sustainable choices to the private sector?

We can differentiate ourselves from other banks and we can attract customers when we give them certain solutions. But more and more banks are doing the same so differentiation may not be so easy. The price of houses that are sustainable can rise so it is better for loans. The bank does not do it only for having a better image to the outside world, it is also because we consider the transformation towards sustainability necessary. The image is not the reason to do this.

6. How a sustainable transition would impact the governance structure?

The bank will make sure we are a bit sustainable. We have a member of the board who is always asking questions about sustainability and what we are doing to reach it. The governance will face this transition. Sustainability must be in the people themselves and not just in one person within the bank.

7. How will the business model be impacted?

It is difficult to differentiate and it is difficult to earn money with it. So, we can move on by selling solar panels and giving energy advice and this can affect the business model.

8. What about the creation of a global scale platform for renewable energy?



There are both advantages and disadvantages. Being international, it can be more difficult to make connections because many people would just “talk” and there will not be any transitions. On the other side, it can give more information on how to make transformation in more sustainable environments. But I am not really sure about it. The platform would be open and would give information to everyone.

9. Nowadays, we are facing the Corona crisis. A solution to this may be the “Green Recovery”. How do you think this may impact the financial sector?

The banking sector, I think, has to do more in terms of sustainability.

Transcript Interview H

1. What is your role in Rabobank?

I am a product manager sustainable living for regional customers. I am responsible for maintaining our products and developing new products or services for sustainable living. For example, special types of mortgages, discounts, to make it easier for our customer to improve the sustainability in their houses. I support a mortgage advisor at a local bank of Rabobank so that they have the information needed and see how I can help them in digital ways to achieve our goals.

2. What are the core values of Rabobank also in relation to sustainability?

We support our mission really well and we try to make sustainability fit perfectly. We want to make the world a better place through sustainable living and we collaborate with the local community to do so.

3. Why financial institutions may consider sustainability in their agenda and how can sustainability be taken into account?

It is important to consider sustainability, otherwise we might face some risks. For example, when we have earthquakes in the northern part of the NL, the houses get damaged. It is in our core values to include sustainability in the living sector. We collaborate also with other parties and banks for sustainable living.



4. *What type of products or services does the bank offer to reach sustainability?*

The green mortgage, by which we offer a discount for sustainable housings, mostly for newly built houses. We have sustainability discounts for houses with very efficient energy labels or energy performance indexes. We offer certain services to our clients; we work closely with *Greenhome* which is a tool for our customers to see how to improve the sustainability of their houses, what it may cost and what they might get in return. We offer our customers free advice specific for their house by phone. We want to make it as easy as possible for them to finance the investments they want to do.

5. *How may the bank benefit from offering sustainable products to the customers?*

We can sell more products and mortgages to our customers that differentiate us from competitors.

6. *Considering sustainability, may the governance structure change?*

I think it will change. The team I am part of in sustainable living, or the business department or the risk department now are all separate, but I think it will be consolidated in the future. Maybe in the future we will select the parties we want to work with so the business model would change.

7. *One of the ideas of the banking sector towards sustainability is to create a global scale platform for renewable energy. How do you think this could benefit the private sector? And the banking sector?*

It would be easier for customers to know what they can do for sustainability for their houses and the easiest ways to finance their investments, for example. This would benefit the bank because it would be easier to increase the sustainable market. In this way the private sector would have information about the steps to take to invest in sustainable living (solar panels etc.), the parties to contact and the way they have for financing the projects. From a platform everyone may benefit. The platform should inform the customers on what is best for their personal situation and show them all the options they have, what they can get in return, the parties they can contact for help, all the subsidies available or the personal loan and mortgage they can get.



8. Nowadays, we are facing the Corona crisis. A solution to this may be the “Green Recovery”. How do you think this may impact the financial sector?

It is a difficult discussion; everyone wants to keep the economy flowing. I think anyways we all want to make a change. We should find a way to help businesses and house owners to make a change. I think sustainability is important now as before the Corona Crisis, because we can see benefits for our environment right now during the crisis. We are working from home, travelling less. For sustainable living we are trying to see how we can adjust the communication during the Corona crisis since more people are staying at home. We always try to find new ways to be connected with the private sector.

APPENDIX E: Sustainable Banking and Sustainable Living

Sustainable Banking	Sustainable Living
<i>A bank to be sustainable should take responsibilities and initiatives (1)</i>	<i>Housing portfolio with poor energy labels is a risk for the future (1)</i>
<i>A bank does the interests of its customers and also its own (1)</i>	<i>A bank should give advice and influence the customers; give solutions to make households sustainable (2;7)</i>
<i>A bank can influence a lot the private sector towards sustainable decisions (1)</i>	<i>Make a better world together through sustainable living and collaborating with local communities (8)</i>
<i>A bank benefits from sustainability in a short-term by providing more loans and in the long-term by building a healthy mortgage portfolio and image (1)</i>	<i>Sustainability discounts for houses with very efficient energy label or energy performance index (8)</i>
<i>A bank can offer sustainability to differentiate from other banks (7)</i>	<i>A sustainable house is more valuable and it is beneficial because of lower financial rates (3)</i>



A bank should affiliate with local initiatives and encourage sustainable and circular projects (3)

Aim to make the real estate more efficient and with zero impact by 2050 (4)

A bank should facilitate entrepreneurs to make their portfolio future-proof, proving financing and sharing knowledge (3)

Living in self-sufficient homes brings to less property costs and less dependence on external providers (4)

A bank can decide not to finance unsustainable investments (5)

To buy a building or asking a loan there are sustainable obligations and requirements (6)

A bank offers products and services to stimulate sustainability (6)

A label: the house has a positive impact on insulation, gas and energy consumption (4;6)

Table 1: Relevant information about Sustainable Banking and Sustainable Living from interviews' quotations / Results