Greening Elderly Care: The show must go on

A qualitative research on the practical impact of the Green Deal Sustainable Healthcare 3.0 in the Netherlands

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Preface

This thesis really marks the end of my time as a student. I am more than happy that I decided to do another Masters as it has helped me develop my knowledge and understanding of system dynamics to work towards a sustainable future. I learned a lot of technical skills and how to look at things from different perspectives, which was sometimes challenging but mostly very interesting. I also started working at Momo Medical in the middle of my first year of Industrial Ecology, which gave me work experience and motivated me to research elderly care organisations. Combining study and work has not always been the most obvious and easy option, but it has been exciting and rewarding at the same time. I would like to thank all my colleagues and especially the production team for their support and motivation. It is possible to combine work and study, especially when people push you and help you when you need it most. I would also like to thank my dearest family and friends for their endless support, sometimes saying "Are you sure you want to do this?", helping me throughout the process, saying I could do it, and providing the best study/work places with coffee when I needed it. I would also like to thank all the people who were willing to take part in this research, especially as you are working on a sustainable health environment. It is because of you that I have been able to deliver this thesis and provide some valuable insights for others to speed up the sustainability process. The show must go on and be at least as good as a five star review. Last but not least, I would like to thank my supervisors Amineh Ghorbani and Saba Hinrichs-Krapels for their feedback and motivation throughout the process and for helping me to take this thesis to the next level.

Apart from learning a lot about the Dutch healthcare sector, Green Deals and the impact of collaboration on sustainability efforts, I learned the most important thing about myself. That is, I am capable of doing more than I will ever imagine. Mum 💫 and Dad, it all worked out anyway.

I hope you all enjoy reading this thesis, learning something and sharing the ideas that come up with others.

Iris van der Kamp
Delft, July 2023

Abstract

The third version of the Green Deal Sustainable Healthcare 3.0 (GD3) in the Dutch elderly care sector represents a dynamic and shared governance model that promotes widespread participation and implementation of sustainability practices. The GD3 provides a blueprint for elderly care organisations to pursue sustainability goals, but its success depends on collaborative efforts supported by various tools and frameworks. This research explores how joining the GD3 facilitates the achievement of sustainability goals in elderly care organisations. Successful implementation of the GD3 can have far-reaching effects, of which inspiring other sectors to adopt similar collaborative approaches. However, its effectiveness depends on the performance of the participating organisations and their use of empowering tools such as the Milieuthermometer Zorg (MTZ). Interaction and cooperation between the diverse group of actors is essential to achieve the desired results, as the GD3 operates through a shared form of governance involving both bottom-up and governmental actors. Active participation, implementation of sustainable actions and maintaining trust and cooperation are crucial for the effectiveness of the GD3. Repeated experience with climate agreements such as the GD3 helps to build trust, reciprocity and reputation among participating actors. All of this is being explored in the context of other challenges specific to care for the elderly, such as staff shortages and an ageing population. Ultimately, the GD3 represents a valuable initiative within the health sector that provides a script for sustainability efforts, while allowing organisations the flexibility to adapt and take artistic license in achieving the intended outcomes. The aim is to present a dazzling sustainability show within three years, signalling a transformed system. Given the urgency of sustainability and the challenges posed by an ageing population, embracing GD3's collaborative and adaptive approach is essential for the future of healthcare, particularly in the context of elderly care in the Netherlands.

Abbreviations List

CSRD = Corporate Sustainability Reporting Directive

EED = Energy Efficiency Directive

EGD = European Green Deal

ESG = Environmental, Social and Governance

EU = European Union

GD3 = Green Deal Sustainable Healthcare 3.0

GHG = Greenhouse Gas

GZA = Groene Zorg Alliantie (EN: Green Healthcare Alliance)

MPZ = MPZ = Milieuplatform Zorg (EN: Environmental platform for Care)

MTZ = Milieuthermometer Zorg (EN: Environmental Thermometer for Healthcare)

RIVM = Rijksdienst voor Volksgezondheid en Milieu (EN: National Institute for Public Health and the Environment)

RvO = Rijksdienst voor Ondernemend Nederland (EN: Netherlands Enterprise Agency)

SDGs = Sustainable Development Goals

UN = United Nations

VWS = (Ministerie van) Volksgezondheid, Welzijn en Sport (EN: Ministry of Health, Welfare and Sport)

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1 | Introduction

The fact that our planet is getting warmer cannot be ignored. It also seems clear that something needs to be done to limit global warming. Some common sustainable practices are separating waste, turning down the heating and using reusable cups instead of disposable ones when drinking coffee. However, changing a system based on take-make-break, (over)consumption and making as much profit as possible to one that is circular and sustainable requires drastic action. In any case, in a sector where protecting human health is a top priority, it is important to focus on environmental sustainability, as greenhouse gas (GHG) emissions are far from beneficial to human health. While the healthcare sector is concerned with improving human health, it is also responsible for 7-8% of total CO_2 emissions in the Netherlands (Kuipers, 2022; RIVM, 2022b).

Aware of this contradiction, the health sector itself initiated a Green Deal for sustainable health care in 2015 (MPZ Milieuplatform Zorgsector, 2022b). This is in line with the global trend of making and signing agreements and treaties to take action and work towards a circular economy, starting with the Kyoto Protocol as the first legally binding agreement, the Paris Agreement and, on a smaller scale, the European Green Deal (EGD) (Maizland, 2022; European Commission, 2019). The Dutch government also started with what it calls the Green Deal Approach, where it creates non-binding Green Deals with other actors to promote sustainability plans (Rijksoverheid, 2023). Since 2011, more than 200 Green Deals have been concluded (Rijksoverheid, 2023), including the third version of the Green Deal Sustainable Healthcare (GD3). The GD3 was launched in November 2022 to reduce greenhouse gas emissions and their negative impact on the environment (Green Deal, 2022b). It was co-authored and signed by different stakeholders, from healthcare organisations to industry associations and banks, and different types of care, from hospitals to elderly care organisations (Green Deal Duurzame Zorg, 2023).

This research focuses on elderly care organisations that have signed the GD3. There are several reasons for this specialisation. First, the Netherlands has a rapidly ageing population (CBS, 2023b), which has led and will increasingly lead to an increased demand for elderly care services (Eggink, Ras and Woittiez, 2017). Furthermore, elderly care organisations are suffering from severe staff shortages, which means that more people need care with fewer people to care for them (ActiZ, 2023d; Weisman, 2022). In addition to these huge challenges, there is a growing awareness of environmental sustainability and the impact of climate change, which is driving the need for these organisations to operate in a more sustainable way (ActiZ, 2023d). So this is an interesting transition in the sense that becoming sustainable has to take place in an already challenging environment. Secondly, in the context of an ageing population, the climate impact of the care sector will increase as more people need care. The need for sustainability will therefore also increase. Thirdly, there is currently very little research on the Dutch government's Green Deal approach, and in particular the Green Deal Sustainable Healthcare. There is also a lack of

research on how the cooperation between all the different actors involved in such agreements works and whether it leads to a positive outcome. Given the lack of research, this is discussed in more detail below.

1.1 | Literature review

Over the past decades, various actors have signed many agreements to combat climate change and take action (Maizland, 2022). One well-known initiative, adopted by all United Nations (UN) member states, is the 2030 Agenda for Sustainable Development, which is 'a shared blueprint for peace and prosperity for people and the planet, now and in the future' (United Nations, 2021b). At its core are the 17 Sustainable Development Goals (SDGs), which aim to end poverty, improve health and education, reduce inequality, boost economic growth, tackle climate change and protect forests and oceans (United Nations, 2023a). Another very important and legally binding international treaty adopted at the UN Climate Change Conference in 2015 is the Paris Agreement, which initially aimed to limit the global temperature increase to below 2°C above pre-industrial levels, but now aims to limit global warming to 1.5°C (UNFCCC, 2023). A search of Scopus for academic literature on the success of cooperation in such large-scale climate agreements, limited to health care, yields only two articles, one of which seemed useful. The main conclusion of this article, written by Deves, Lang, Bourrelier and Valerian (2017), is that the problem is too big to be tackled globally, so bottom-up dynamics are important for the implementation of sustainable solutions.

One might therefore ask whether a smaller agreement within European borders would meet this requirement. An important framework established by the European Union (EU) to take a leading role in reducing emissions and reaching net zero by 2050 is the EGD (Haines and Scheelbeek, 2020). The EGD is the result of climate policy prioritisation and is intended to provide a strategy for all EU members to work towards a circular economy (Eckert and Kovalevska, 2021). It was therefore created by the European Commission to provide direction for EU legislation and policies to become a climate neutral continent by 2050 (Eckert and Kovalevska, 2021). In order to become a climate neutral continent, the EGD includes several priorities ranging from cleaning up the energy system to cleaner transport and from renovating buildings for a greener lifestyle to pricing carbon (European Commission, 2021). Furthermore, part of the EGD is to "protect human health and well-being of citizens from environment-related risks and impacts (European Commission, 2019)", which is important for current and future generations. In addition to focusing on, among other things, promoting active travel, providing more green spaces, enabling energy-efficient housing and supporting dietary changes, the EGD also focuses on GHG emissions from the healthcare sector (Haines and Scheelbeek, 2020). According to Haines and Scheelbeek (2020), reducing GHG emissions could prevent about 3.6 million premature deaths worldwide each year that would have been preceded by a disease process, putting

additional pressure on the healthcare sector. Applying this to the European continent would save nearly 360,000 lives, as Europe's population accounts for around ten per cent of the world's total (Worldometer, 2023). The impact on human health is one thing, the fact that it is partly caused by the healthcare sector is another.

In line with the EGD, the Dutch government has also been following a 'Green Deal approach' since 2011 (Ganzevles, Potting and Hanemaaijer, 2017). This means that the national government makes Green Deals with industries that are 'considered critical and high priority (Van Langen and Passaro, 2021, p. 3)' in order to support sustainable economic growth. This is in line with the Paris Agreement, which requires governments to develop a bottom-up approach to implementing mitigation measures (Banda, 2018). Van Langen and Passaro (2021) state that the Green Deals can be seen as a policy instrument that should serve as a communication channel between the national government and all kinds of other organisations related to a specific industry, in order to make the Dutch economy greener and ultimately circular (Van Langen and Passaro, 2021). It is important to note that the Dutch government not only provides a communication channel, but also has to take action. Government action includes creating or changing laws and regulations, raising awareness, supporting sustainable organisations and initiatives, sharing information about funding and creating industry-wide agreements (Van Langen and Passaro, 2021). To date, 235 Green Deals have been concluded in the Netherlands, including the GD3 (Green Deal, 2022a). However, no research has been done on the effectiveness and successful cooperation of these 235 Green Deals.

1.1.1 | The healthcare paradox

In the Netherlands, the healthcare sector is responsible for 7-8% of total CO_2 emissions (Kuipers, 2022). Therefore, this sector needs to significantly reduce its emissions in order to comply with the Paris Agreement and the EGD. Currently, the GD3 has been established following two previous versions of the Green Deal. The first Green Deal Sustainable Healthcare was launched in 2015 with the participation of more than one hundred parties (MPZ Milieuplatform Zorg, 2022b). This version started as a bottom-up agreement between hospitals and other healthcare organisations (MPZ Milieuplatform Zorg, 2022b). The Green Deal Sustainable Healthcare 2.0 started three years later and was signed by 330 parties (MPZ Milieuplatform Zorg, 2022b). In addition to hospitals and healthcare organisations, the Green Deal 2.0 was also signed by banks, insurers and the Ministry of Health, Welfare and Sport (VWS) (MPZ Milieuplatform Zorg, 2022b).

In December 2022, the GD3 was launched, with a focus on setting clear targets rather than 'just' providing incentives to change unsustainable patterns. The GD3 is intended to contain more specific commitments and is set up as a collaborative approach between the Dutch national government and representative organisations from the healthcare sector, (health) insurers and banks. The GD3 has five key themes (see Figure 1). The first is health promotion for patients, clients and employees in the healthcare sector.

The second focuses on increasing knowledge and awareness of the health sector's impact on the environment and climate. The third theme is to reduce CO_2 emissions by 55% in 2030 compared to 2018 and to achieve net-zero healthcare by 2050. In line with the third theme, the fourth theme includes reducing the use of primary resources by 50% in 2030 compared to 2016 and working towards circular healthcare by 2050. Finally, the fifth theme of GD3 is to reduce the environmental impact of medicines. (Ministerie van Volksgezondheid, Welzijn en Sport, 2022; Green Deal, 2022b)

Figure 1: *The five pillars of the GD3*

The healthcare sector is extremely important to consider when aiming for a circular economy, for two reasons. First, as mentioned above, the healthcare sector is responsible for 7-8% of total CO_2 emissions in the Netherlands (Green Deal, 2022b; Kuipers, 2022). In addition, the healthcare sector produces 4% of total waste and is responsible for 13% of resource consumption in the Netherlands (Green Deal, 2022b). Overall, the health

1 **Health promotion** of patients, clients and employees

2 **Increasing knowledge** and **raising awareness** about the impact of the healthcare sector on the environment

3 **Cutback of CO2 emissions** by 55% in 2030 & **Net-zero** healthcare by 2050

4 **50% Less use of primary resources** in 2030 & **Circular healthcare** in 2050

5 **Reduction of impact of medicines** on the environment

sector has a significant environmental footprint. Second, the healthcare sector is concerned with curing people, while at the same time indirectly contributing to an increased burden of disease through its greenhouse gas emissions (RIVM, 2022a). The reasoning is illustrated in Figure 2: the more GHG emissions, the more heat is trapped in the atmosphere, leading to climate change, and a changing climate leads to heat stress, longer hay fever seasons and the emergence of new diseases and infections (RIVM, 2022a).

Figure 2: *Schematic representation of the environmental footprint of the healthcare sector in the Netherlands*
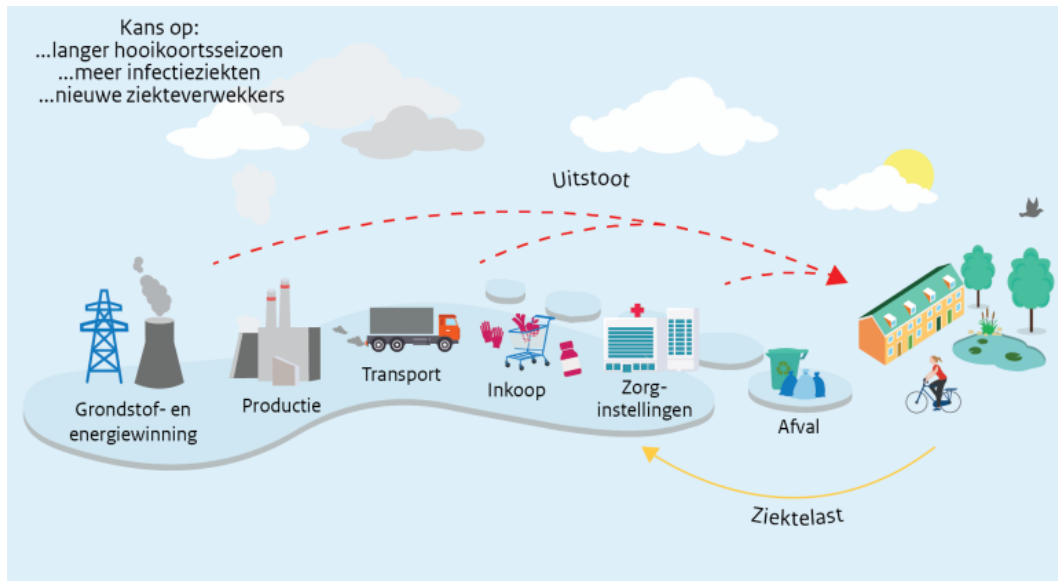
Action is needed to change patterns and break the cycle. The GD3 serves as a blueprint for all parties committed to working together on circular health care, but it is not yet clear whether this blueprint will be translated into concrete action. Nor is it clear whether such collaborative efforts will actually contribute to sustainable development. Given the challenges in the field of elderly care mentioned above, which form the context in which sustainability measures need to be implemented, it is of interest to gain more knowledge to assess whether collaborative approaches to sustainability are effective and successful.

1.1.2 | Research gap

Already in search of an answer to the above considerations, especially in light of the proliferation of climate change agreements and the global ageing population, the following search string was used in Scopus (Figure 3); this yielded 47 results, of which three articles were considered valuable and relevant to this research. The other 44 articles focused on only one or two of the three main themes in the search string, either on collective action without the environment or health component, or on environmental impacts on health without collective action.

Figure 3: *Search string in Scopus*

> **TITLE-ABS-KEY** ("collective action" AND ("green" OR "climate" OR "environmental") AND ("elderly" OR "care home" OR "health provider" OR "hospital" OR "health service" OR "healthcare"))

Restricting the search to care for the elderly produced 12 articles, but no useful results as none of them focused on collective action approaches to sustainability efforts in health care. Looking only at the Netherlands yields no articles at all. Finally, a search for articles related to collective action, climate agreements and health care also produced no results. Therefore, the following articles were included in the literature review (Table 1):

Table 1: *Three articles included in the literature review*

Author/Date/Title	Aim of the Article	Methods Used	Findings
Nevitt, M. (2023). "Climate Security Insights from the COVID-19 Response"	To identify and analyse a set of lessons from the response to the COVID-19 pandemic. These lessons can inform our response to climate change.	*(Unclear)*	COVID-19 shows that our international and national governance structures are not ready for the kind of (global) collective action needed to tackle climate change. Transformative action is needed because there is no vaccine for climate change, as there is for COVID-19.
Bump, J.B., Krishnamurty Reddiar, S., & Soucat, A. (2019). "When Do Governments Support Common Goods for Health? Four Cases on Surveillance, Traffic Congestion, Road Safety, and Air Pollution."	To gain insight into when governments decide to support public goods for health through four case studies in the United States, England, Argentina and India.	Expert group meetings, narrative building, primary and secondary source analysis,	The authors outline a strategy for governments to make decisions about action on common goods. They also mention the importance of leadership. Coordinating action on common goods is seen as difficult.
Reena, D. (2017). "Tragedy of climate agreements in post-Kyoto phase: Copenhagen and beyond."	To analyse the progress made on climate change in the post-Kyoto period, to answer the question of how successful agreements such as the Copenhagen Accord have been in tackling climate change, and to look for new approaches and opportunities to tackle climate change.	Analytical and descriptive methods. Primary and secondary document analysis, interviews, observations and conversations.	As climate change is a global problem, every state should take initiatives to solve it. Preferably, each state should participate in an international cooperation to reduce greenhouse gas emissions. In particular, the participation of both developed and developing countries is desirable.

Nevitt (2023) draws a parallel between the COVID-19 crisis and the climate crisis as collective action problems and provides some insights into forms of top-down and bottom-up governance to address complex global issues. However, it does not give us

insights into the success rate of collective action, nor does it focus on elderly care in particular. Nevertheless, Nevitt's (2023) contribution is useful for this research as it shows how international institutions need to take the lead in collective action to tackle global problems such as the COVID-19 pandemic and climate change. This is relevant to this research as many climate change agreements aim for a global approach to tackling climate change and it relates to the role of governments. Regarding the latter, the article by Nevitt (2023) is fruitful for analysing the role of the Dutch government in its Green Deal approach and GD3 in particular. The article by Bump, Krishnamurthy Reddiar and Soucat (2019) is not relevant in terms of providing insights into the level of cooperation between healthcare actors in climate agreements, but it does elaborate on the role of government actors in common goods. As the Dutch government decided to participate in and present the third version of the Green Deal Sustainable Healthcare, this article serves as a fruitful background on the reasons and implications of government involvement. The authors state that timing is important (Bump et al., 2019), which is interesting in view of the fact that the Dutch government only presented and took the lead in the third version of the Green Deal Sustainable Healthcare. This is also related to the latter, as the healthcare sector itself is keen to change behaviour and act collectively, which Bump et al. (2019) argue is important to engage the rest of society. Finally, Reena (2017) focuses on climate agreements in the post-Kyoto Protocol phase, particularly the challenges related to the implementation and effectiveness of mitigation measures. This is of interest to the present research, as the focus here is on the implementability of GD3. Although Reena (2017) does not specifically mention the health sector and the success of collective action between different actors, the article assesses the success of climate agreements in the post-Kyoto phase, which is of interest for drawing lessons. One example is the problem of collective action with opportunities for freeriding, which is applicable to all types of collaboration (Reena, 2017). In addition to these articles, another report published by Wageningen University & Research shows that there is a lack of in-depth research on the successful implementation of sustainability measures through participation in GD3 (Kamphorst & Donders, 2022). This research report is exceptional in that it takes into account the focus of GD3 on different levels of cooperation, which makes it interesting for analysis and elaboration of the information provided (Kamphorst & Donders, 2022).

Given this lack of (sufficient) research on climate change action in healthcare, let alone focused on elderly care organisations, it is important to shed some light on the subject. Especially as two of today's hot topics and challenges overlap: an ageing population with fewer workers to provide good care, and climate change. What's more, this is only going to get worse in the coming years, which means that research into what can be done to become resilient in the future is very important. In addition, given the large number of actors involved in the GD3, it is important to explore the extent to which all these parties can influence, have rights and a say, and strengthen decision-making processes (Colding, Barthel, Ljung, Eriksson and Sjöberg, 2022) and achieve the five goals as described in the

GD3. However, there is currently a lack of research on the extent to which collective action promotes the achievement of collective goals. Ostrom (2010), the founder or at least a major influencer of collective action theory, has written a lot about a multi-actor approach to climate change. However, there are conflicting results in different articles by Ostrom on whether there should be an enforced set of rules or whether a polycentric system will be able to govern itself (Ostrom, 2010b).

Therefore, this research will address this gap by focusing on the actors working together to achieve the goals set out in GD3. In addition, this research incorporates the concepts of participatory governance and collective action, as these concepts can provide complementary insights into the overall structure and extent of collaboration between the different actors. In order to be detailed and comprehensive, the research will focus on organisations in the field of elderly care, but will serve as a case study for other health care sectors. As mentioned above, it is important to gain more knowledge about elderly care as we have an ageing population, staff shortages and a health care system that is in no way sustainable or future-proof. Therefore, the aim of this research is to gain insight into the collaboration between different actors and, ultimately, how this collaboration contributes to achieving the five main objectives as set out in the GD3. The question to be answered is therefore not about the results of individual organisations in achieving the objectives, but 'how' they got there, and in particular 'how' they got there through their commitment to working with others.

1.2 | Research Questions

Given the large number of Green Deals and collective approaches to climate change, it is important to conduct research on the different actors involved and the outcomes of these agreements. Therefore, this research takes a case study approach and is qualitative in nature to show the different perspectives of different actors in elderly care and ultimately provide insights into the collective action approach to climate change. As such, the following main research question has been composed:

"How does joining the GD3 help elderly care organisations achieve their sustainability goals?"

To answer this main research question, several sub-research questions have been constructed:

1. What does cooperation look like in terms of reputation, trust and reciprocity?
2. What are the benefits for elderly care organisations of participating in the GD3?
3. What is the linkage structure between the many and varied actors?
4. How are the objectives set out in the GD3 translated into concrete practical measures?
5. What are the challenges on the way to achieving GD3 goals?

1.3 | Societal Impact & Scientific Relevance

This research is scientifically relevant because it anticipates the increasing number of treaties and agreements that are being set up to combat climate change. As more and more actors feel the urge to participate in efforts to combat global warming, it is of interest to see how these actors work together, what they gain from participating in certain agreements, and what results are achieved through the collective action approach. Research on one of the Dutch Green Deals and the collaborative approach is currently lacking and this study aims to fill this gap. Furthermore, the influence of cooperation between different actors within an agreement on the results achieved is an under-researched area. Finally, it is considered important to study organisations providing care for the elderly because of their increasingly central role in our society.

Equally important is the societal impact, which generally includes efforts to provide more insight into tackling climate change through a collaborative approach. Providing insight into the different reasons why different actors participate in and approach climate change agreements or treaties can also improve cooperation and encourage non-active actors to join such treaties. In particular, by providing more insight into the collaborative process and whether it promotes the achievement of objectives, this research contributes to knowledge and learning about how collaborative approaches can support climate action. Finally, this research could help elderly care organisations in their decision-making processes about sustainability efforts and be aware of the impact they may have on their employees, residents and other stakeholders.

1.4 | Structure

In the next chapter I explain the methods and techniques used, the most important being interviews, documents and audio-visual analysis. Research design, data analysis and ethics are also discussed in this chapter. Chapter three builds on the theoretical framework, including the concepts of participatory and shared governance and collective action theory. Chapter four looks at the actors at different levels, from top to bottom or from national to local. This chapter provides information about GD3, the actors involved and the interrelationship between additional (sustainability) frameworks. Chapter five presents all findings related to the variables described by Ostrom (2009; 2010) and defined in the theoretical framework. Finally, the discussion shows the relationship between the findings and the theories, answers all the sub-research questions, identifies the limitations of this research and suggests further research. The conclusion concludes this thesis by briefly mentioning the main findings of this research and answering the main research question.

2 | Methodology

Qualitative research aims to understand a phenomenon through an open and flexible approach and is concerned with words rather than numbers (Bryman, 2016, p. 375). Furthermore, qualitative researchers seek to see through the eyes of the people they study in order to interpret the social world from their perspective (Bryman, 2016). There is an emphasis on description, context and process in translating people's experiences, meanings and interpretations into a scientific study (Bryman, 2016, p. 395). Qualitative research is often longitudinal in nature, with a limited structure to accommodate and capture all aspects of the social world being studied and the people within it.

The current research is qualitative in nature and lasted approximately six months. During these six months an extensive literature review was carried out, interviews were conducted, documents and audio-visual material were analysed and a logbook was kept. The use of different research methods meant that triangulation took place (Bryman, 2016). Both an inductive and a deductive approach were used during the research process. This means that collective action theory provided the basis upon which the research questions were constructed. In short, collective action theory was the lens through which the questions were developed. Finally, data analysis led to the embedding of collective action theory, but also to the inclusion of participatory governance, as this concept, in addition to collective action theory, fitted well with the findings. The data collection process could be seen as iterative, as it involved moving back and forth between data and theory (Bryman, 2016, p. 23)

2.1 | Research Setting: Access and Sampling

This research took place in the Netherlands in the first half of 2023. The GD3 was officially published on 4 November 2022 and signed on 8 December 2022 (Ministerie van Volksgezondheid, Welzijn en Sport, 2022). This research therefore focused on the current context and took a case study approach. The latter implies that this research can be used as an example for other Green Deals or other collaborative approaches and initiatives that have been set up to work on a circular economy. This applies to all types of agreements in which multiple actors work together to develop measures to achieve concrete (climate) goals.

An article by Ernst Kuipers on LinkedIn inspired me to research the GD3 (Kuipers, 2022). Further research on the participants in the GD3 resulted in an overview of different types of stakeholders, which is visualised in Figure 4 (Ministerie van Volksgezondheid, Welzijn en Sport, 2022).

Figure 4: *Overview of the types of organisations that co-authored and signed the GD3 (Ministerie van Volksgezondheid, Welzijn en Sport, 2022).*

National Government

Healthcare organisations (Hospitals | Disability care | Mental health care | Elderly care)

Umbrella organisations | Sector/branch organisations

Offces | Institutions | Suppliers | Producers | Wholesalers

Knowledge institutions | Scientific associations

Banks | Health insurance funds | Care offices

As more than 150 organisations belonging to different stakeholder groups have signed the GD3 (MPZ milieuplatform zorgsector, 2022b), I decided to focus on a specific group of actors, namely the elderly care organisations that are members of ActiZ. This group consisted of 25 elderly care organisations and a cooperative, Iedereen Zorgt (EN: Everyone Cares), of 13 elderly care organisations in the province of North Brabant (Actiz, 2022b; Iedereen Zorgt, 2023). As organisations can sign the GD3 until 2026 (Green Deal Duurzame Zorg, 2023), I decided to focus on organisations that signed the GD3 on 8 December 2022 (Actiz, 2022b). In addition, I considered all co-authors of the GD3 (see Figure 5) to be important for two reasons. First, many sectoral organisations were involved in writing the GD3, representing the different interests from different corners of the healthcare sector, such as (academic) hospitals, disability care, mental health care and elderly care (Green Deal Duurzame Zorg, 2023). Secondly, other umbrella organisations representing banks, research, insurers and VWS co-authored the GD3 (Green Deal Duurzame Zorg, 2023), so it is important to consider their influence on the final agreement. Discussions with representatives of some of the co-authors helped to gain a full understanding of their involvement and influence on how it is ultimately taken up in practice.

Figure 5: *Co-authors of the Green Deal Sustainable Healthcare 3.0*

With a list of 15 co-authors of the GD3, collectively known as the 'regiegroep' or steering committee, and 38 elderly care organisations, I contacted each organisation or representative via LinkedIn or email, asking for an interview of about one hour. I soon found out that the 13 elderly care organisations in North Brabant also had the same representatives for sustainability issues in their partnership. A

total of 24 people replied that they were interested. Through interviews with representatives of the organisations responsible for integrating the GD3 into the organisation, I obtained contact details of other people from the organisations. It also sometimes happened that people had invited others to take part in the interview. Thus, a snowball sampling strategy was useful to gain access to the network of my research population (Bryman, 2016). In addition to organisations affiliated with the industry organisation ActiZ, I also scheduled interviews with representatives from government departments and other industry organisations, as they were co-authors of the GD3 and therefore valuable sources of information. It is important to note that I focused on specific representatives from organisations and targeted them by job title, online visibility, or through other contacts, which means that while the group of informants was to some extent diverse in terms of gender, age, colour, ableism and the intersections of these categories, it was not targeted as such.

Although the COVID-19 pandemic had come to an end in May 2022, it was still a hot topic in the interviews and came up very frequently. The two-year pandemic has left its mark on today's society and therefore also on working and living in (elderly care) organisations. It was therefore important to take this contextual factor into account.

2.2 | Ethnography

Conducting ethnographic research means observing a particular group, participating with them and acting as if you are one of them (Neyland, 2008). By immersing oneself in the culture of the research group and interacting, observing and engaging with the people of that particular group over a period of time, the researcher is able to gain an emic perspective or, in other words, an insider's perspective. Ethnographic researchers can use participant observation, conduct interviews, and use documents as sources of data (Bryman, 2016, p. 423). Particularly in the current era, often referred to as the information or digital age, much information can be found online. Going into the field today also means exploring the World Wide Web to see what is out there. The role of the Internet has become increasingly embedded in people's lives, accelerated by the COVID-19 pandemic. An online approach in this research involved examining websites, social media accounts, reports, publications, news articles, videos, photographs and podcasts (Bryman, 2016, p. 450).

Prior to the data collection period, my aim was to attend meetings and events organised for the GD3. However, these meetings and events did not take place during the research period. Most of the meetings took place in the run-up to the GD3 and not in the current phase of implementation and integration of the five pillars of the GD3 in the organisations. Therefore, I decided to ask for some physical meetings and interviews in (elderly care) organisations in order to still get a sense of the organisation. In addition, going 'on site' to an elderly care organisation allowed me to see concrete sustainability measures

in place. However, only two interviews were conducted offline as many participants worked from home and had a tight schedule. An important part of conducting the interviews was taking field notes. These notes served as a memory and allowed reflection on the research process. For interviews conducted physically in an elderly care organisation, my notes ranged from personal thoughts and feelings to methodological observations. Online interviews resulted mainly in notes of my own thoughts. Being one's own research instrument can influence data collection; reflexivity is paramount. Therefore, I also kept a diary during the data analysis process and made notes to record my feelings, experiences and impressions. Finally, I made analytical or meta-notes, which reflect experiences or thoughts about methodological choices (Bryman, 2016, p. 444). In doing so, I realised during the data collection process that participant observation would not be an appropriate research method for this particular research, so I focused on other research methods as mentioned above.

2.3 | Interviews

Conducting interviews was my main research method. I conducted 21 interviews both online and offline, two of which were responses to questions sent by email. I used a list of topics and a list of research questions (see Appendix 1). For all interviews I used a semi-structured interview approach, which means that I tried to maintain a conversation between the participants and the researcher, keeping the questions and the aim of the interview in mind. The main reason for choosing this approach is that there was a reciprocal relationship between the participants and the researcher, as the participants were able to share their stories, visions and missions, while I gained knowledge about their experiences, thoughts and perspectives (Bryman, 2016). As a result, most of the interviewees were very enthusiastic about sustainability in their organisations, which led to a lot of additional information that proved to be very useful. In addition, new questions were raised and developed during the interviews that could be addressed in later interviews. Thus, an iterative process of interviewing was used, with some new questions being added after the initial interviews were completed, while at the same time moving towards a more semi-structured form of interviewing in order to check answers and interpretations and to go deeper into very common themes. Interviews with people from different organisations were prepared slightly differently, as industry organisations operate differently and have a different role within the Green Deal compared to elderly care organisations. This meant that the co-authors' focus was on the construction process of the GD3 rather than the practical implementation of the five pillars of the GD3.

A face-to-face interview was not always possible, so video calls were made, and one telephone call was made. Phone calls were only made if a participant did not have the option of a video call or preferred another way of communicating. Video calls were preferred mainly because I could see body language and facial expressions. In addition, a

video call helped to put informants at ease and provided a way for them to get to know me. This in turn helped me to gain further access to other representatives. All interviews were recorded on my laptop or smartphone for re-listening, transcription, coding and analysis.

To ensure confidentiality and anonymity, all participants in this research were given pseudonyms. The organisations for which participants work are openly identified in this research for three reasons. First, given the scope of this research and the involvement of organisations that have signed up to the GD3 by 8 December 2022, it was considered important to mention which organisations are included and have committed to the sustainability goals in the GD3. Secondly, the organisations involved are so large that it is not immediately possible to identify the participants directly. Thirdly, all participants in this research were very enthusiastic, so complete anonymity is not considered necessary. An overview of the participants, their role within the organisation, the organisations they work for, the type of organisation and whether their organisation is a co-author or signatory is given in Table 2 below. The pseudonyms are used in the narrative sections of the findings, so Table 2 can be referred to for further context. A summary of all interviews can also be found in Appendix 3.

Table 2: *An overview of the participants in this research, their roles, the organisation they work for, the type of organisation, and the role of the organisation in the GD3*

Person(s) | (Pseudonym)	Role of the person in the Organisation	Organisation	Type of Organisation	Role of the organisation in the GD3
Interviewee 1				
Interviewee 2				
Interviewee 3				
Interviewee 4 | Interviewee 5				
Interviewee 6				
Interviewee 7				

Interviewee 8				
Interviewee 9				
Interviewee 10				
Interviewee 11				
Interviewee 12 | Interviewee 13				
Interviewee 14 | Interviewee 15				
Interviewee 16				
Interviewee 17				
Interviewee 18				
Interviewee 19				
Interviewee 20				
Interviewee 21 | Interviewee 22				
Interviewee 23				
Interviewee 24*				

(answered via e-mail)				
Interviewee 25* (answered via e-mail)				

2.4 | Document & Audio-Visual Material Analysis

According to Bryman (2016), documents that are readable, not specifically produced for the researcher, available (and maintained) for analysis, and relevant to the researcher can serve as data sources. In this research, these documents or data sources included letters, newspapers, reports, official documents, journals, websites and social media outputs, and could provide insights into various aspects related to sustainability and (green) business in healthcare, such as history, context, change, development, policy, non-academic research, transparency and external organisations. For this particular research, the main data sources used were government reports, news articles, LinkedIn posts, implementation documents and organisational reports. In addition to textual documents, audio-visual sources such as podcasts, photographs and videos can be valuable sources of information (Bryman, 2016). Audio-visual materials are increasingly available and provide information about history, context, behaviour, individual stories, discourses, developments, media performances and external presence. An example of a public podcast that was considered useful for this research is 'De Groene Zorg Podcast (2023)', which means 'The Green Healthcare Podcast'. In this podcast they talked about the greening of healthcare, touched on various topics within green healthcare and suggested small steps that can be taken to make a healthcare organisation more sustainable.

2.5 | Logbook

Finally, a logbook was kept to keep track of all the relevant organisations, their accessibility, the contact person(s) and how to contact them. I also kept track of activities and meetings that were planned and took place, with whom, where and what happened. This helped to structure the research activities in chronological order. In addition, reviewing and reflecting on the research activities allowed me to assess the importance of events, where follow-up was of interest and whether there were gaps that needed more attention.

2.6 | Data Analysis

The analysis of the data began during the fieldwork period, to organise the data and find gaps, ambiguities or focal points that deserved more attention. For example, I found that participatory governance was an important concept to add to the theoretical framework.

The data collected was manually coded. All transcripts were compiled into one document and coded according to recurring themes. For example, if someone mentioned financial aspects, it was coded by marking it green; if someone mentioned knowledge sharing, it was coded by marking it pink. Data coding is used to categorise all the data collected into concepts that can form the basis of the final theory (Bryman, 2016). As mentioned above, data analysis already took place during the data collection process, and as a result I was able to check that my interpretation of the data was consistent with what the participants meant during the interviews in late April/early May 2023.

2.7 | Ethics

A number of ethical considerations were taken into account. First, I made my role as researcher clear to my informants throughout the research process. By having an open role, informants always know what they are participating in, what they can expect from me, and it provides space to build an equal and open relationship. According to Neyland (2008), an open role also provides the opportunity to go deeper and get feedback from informants. Secondly, I obtained consent from all my informants through a consent form and informed them of their rights (see Appendix 2). This meant that informants could stop at any time, they were informed that they would be given pseudonyms in the final thesis, they were asked if they wanted the interview to be recorded and they were told that they had the right to read the final result. Thirdly, I decided to use pseudonyms by default and to use anonymisation when informants explicitly asked me to do so. Finally, sensitive information was handled with discretion. Something was not included in the research if someone did not want it included or did not want to say it on the record.

Before conducting the interviews, I followed the procedure for ethical approval at TU Delft. This involved submitting a Data Management Plan, a Checklist for Human Research and an Informed Consent Form. These were first checked, signed and dated by my supervisor. Then the TU Delft Human Research Ethics Committee reviewed the documents and approved my application. The approval process helped me to assess the possible risks of this research and to be aware of the possible vulnerability of the participants. This was taken into account throughout the research process.

3 | Theoretical framework

The theories underpinning the current research are participatory governance and collective action theory. First, participatory governance is important because it structures decision-making processes by involving other actors. In the case of the national government in the Netherlands, participatory governance in relation to sustainability efforts concerns a Green Deal approach. Another important feature of participatory governance is networks, which refers to the large number of actors. Secondly, collective action theory is important because it provides a framework for unravelling cooperation between several actors with similar interests. This part is divided into variables that apply to non-repeating situations, variables that apply to repeated situations, and the core relationship between trust, reputation and reciprocity and their effects on cooperation and ultimate net benefits.

3.1 | Participatory Governance

Since the Paris Agreement was signed by 196 Parties (or nation states), almost all national governments have developed and adopted policies and strategies to combat climate change (Boasson, Burns and Pulver, 2022). As climate change affects all different aspects of society and thus all different groups of actors, adaptation to climate change should also involve multiple actors. Following this argument, the current Green Deal approach of the Dutch national government calls for the inclusion of other actor groups in its adaptation efforts. Other actors in this case could be all kinds of non-governmental organisations, such as sectoral organisations, interest groups and businesses. It is important to note that participation and governance do not need to involve governments; rather, it is about the implementation and 'doing' of governance (Fukuyama, 2013).

There is a growing demand for participatory approaches for a number of reasons. First, in a globalised world, governance does not take place in a particular arena or within particular borders. It is therefore important to involve local, national and global actors in the decision-making process (Gaventa, 2003). Especially when decisions affect the lives of (all) people. Second, and in addition to the first, because of the interconnectedness of different (groups of) actors around the world and the impact of certain problems on all people, decisions cannot be made by one actor alone (Van den Hove, 1999). Since climate change affects all people on earth (Van den Hove, 1999), it could be argued that sustainable development requires action by all people on earth. Thirdly, because the whole system and current behaviours need to be changed, but the complexity and uncertainty of climate change is enormous, it can be seen as essential to work together on this issue (Van den Hove, 1999). Governance can be one way of structuring efforts to achieve sustainability.

3.1.1 | Green Deals

A good example of governance around sustainability efforts is the EGD presented by the European Commission in 2019 (European Commission, 2019). The main goals of the EGD

are to reduce greenhouse gas emissions, plant 3 billion additional trees and become the first carbon-neutral continent by 2050 (European Commission, 2019). Long before the EGD, shortly after the Kyoto Protocol, the EU started working with different stakeholders in the environmental policy-making process (Van den Hove, 1999). Such participatory approaches are considered valuable because they support the achievement of climate objectives, as climate change affects all areas of life, such as social, cultural and economic (Van den Hove, 1999). An advantage of such collaborative approaches is that, due to the complexity and uncertainty of climate change, different perspectives, knowledge and visions can contribute to the development of decisions and policies (Van den Hove, 1999). Newig and Fritsch (2009) add that the participation of non-state actors in environmental policy could be a strategy to address the problem of the current ineffectiveness of these policies in Europe. In cases such as the EGD, it could be said to be a top-down initiative by a state actor to involve other organisations and citizens in its executive processes. However, it could also be seen as an interactive process between different actors.

An interesting change within the Green Deal Sustainable Healthcare is that the first was initiated by the healthcare sector itself (MPZ Milieuplatform Zorg, 2022b). The second also involved banks, insurers, ministries, industry organisations and other parties (MPZ Milieuplatform Zorg, 2022b). The GD3 is published by the VWS (Ministerie van Volksgezondheid, Welzijn en Sport, 2022) in cooperation with all the aforementioned organisations. The shift from a bottom-up initiative to a top-down approach means that there should be a balance and equal cooperation between all the different parties involved. Here, it is important to investigate how a balanced partnership can be effective (Banda, 2018). With regard to the number of existing treaties and agreements, it could be useful to investigate what motivates actors to participate in these treaties and agreements in order to identify the motivation for joining. In addition, given the large number of treaties and agreements, questions could be asked about the success or failure of all these treaties and agreements. According to Gaventa (2003), participation in government processes can create opportunities for transformative change. However, Gaventa (2003) adds that in order to achieve the transformative change needed to address climate change, we should also learn about the outcomes, who it works for and who it does not work for, and the impacts on other areas of life. Subsequently, it is crucial to consider sustainable development as an integral part of other parts, such as the social and the economic, which are managed along certain cadres in order to make it measurable.

Furthermore, signing the GD3 is one thing, involving the whole organisation is another. A term used in the Integraal Zorg Akkoord (IZA), which can be translated as 'Integral Health Care Agreement' and is another important agreement between the national government and healthcare actors focusing on maintaining good, accessible and affordable care for the future (Rijksoverheid, 2022c), to describe the intention to involve people from different levels both between and within the organisation is 'shared governance' (ActiZ et al., 2022). Shared governance aims to break down traditional layers of bureaucracy and

focus on empowerment, openness and participation in decision-making and change processes for all people working in an organisation (Anthony, 2004). Engaging all people working in the care and well-being sector means engaging approximately 1.4 million people (CBS, 2023a). However small, the snowball effect will be significant in terms of people taking things back home from the GD3. In this way, information about sustainability measures trickles down through the organisation to people's homes and vice versa.

Participatory and shared governance thus lead to the involvement and engagement of many actors, which is beneficial for large change processes that require some form of structuring. One way of involving and aligning all these actors is to focus on networks, as these show how different actors are related to each other, help to build structures around knowledge and can help to steer policy (Batt and Purchase, 2004). Knowledge can be maximised through networks, particularly because they consist of both internal and external actors (Batt and Purchase, 2004). Internal actors are those who are actively involved in the network, while external actors are involved and influenced by another (internal) actor. Networks are useful for, especially government actors, as they can help to steer policy and help with institutionalisation (Kamphorst and Donders, 2022), which applies to the GD3. However, it is important to question and critique the impact and influence of non-state actors on the final decisions made. The more actors involved, the higher the transaction costs and thus the costs to the final outcome (Ostrom, 2009). A balance must therefore be struck between the size of the group, the level of involvement and the speed of the decision-making and participation process.

Once a collaborative network has been established, the next step is to decide how to work together, turn ideas into concrete action plans and define the way of working. A theory that can be used to analyse the latter is the theory of collective action, which is discussed below.

3.2 | Collective Action

A collective action approach arises when a group is formed to promote the common interests of the actors (Olson, 1989). Put another way, a collective action approach already involves two or more actors who aim to address a common problem (Olivier, 2019). For the actors involved in GD3, the common interest is the preservation of healthcare in the Netherlands and logically their problem is that the current organisation of healthcare is very unsustainable. However, a collective action approach is not something that works immediately and always. Ostrom (2009; 2010) identified five variables that influence the likelihood of collective action in non-repeated situations and three variables that influence the likelihood of collective action in repeated situations. As such, these variables affect elements of reputation, trust and reciprocity, which ultimately affect cooperation and the benefits that result from that cooperation. A scheme of all the variables and their impact on one another is visible in Figure 6 below.

Figure 6: *Ostrom (2009)*
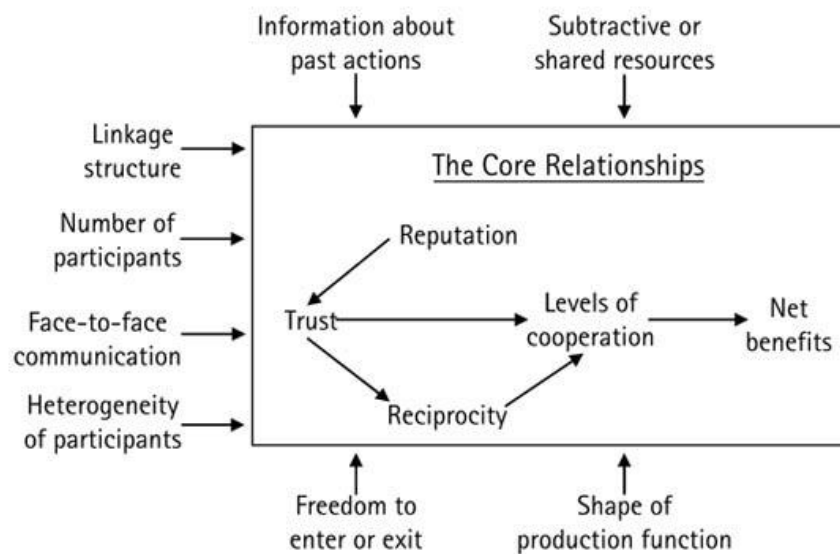
3.2.1 | Variables in Non-Repeated Situations

First, the size of the group is important in determining whether or not collective action is successful (Ostrom, 2010b). As the size of a group increases, the likelihood that the group will achieve its interests decreases, as does the chance of achieving an optimal outcome (Ostrom, 2010b). One reason for this is that individuals believe that their freeriding will not be noticed and, perhaps more importantly, that their freeriding will not affect the good being provided (Ostrom, 2009). Another reason is that there are higher transaction costs involved in reaching agreement in larger groups (Ostrom, 2009). However, some theorists also argue that the larger the group, the easier it is to provide a public good (Ostrom, 2009). Marwell and Oliver (1993) criticise collective action theory as originally developed by Mancur Olson in 1965, but still relevant to the first variable mentioned by Ostrom (2009), by stating that collective action is mainly generated by a few active, committed and resourceful individuals rather than the average group member. In this sense, it should not matter how large the group is, only that the larger the group, the more likely it is that there will be more invested individuals.

Second, related to the latter and applicable to public goods, the larger the group, the more likely it is that benefits will accrue (Ostrom, 2010b). The reason for this is that the additional resources brought by individuals increase the likelihood that a benefit will accrue to all (Ostrom, 2010b). In the case of common pool resources, the larger the group, the less likely it is that social benefits will accrue due to problems of free riding, overexploitation and/or crowding (Ostrom, 2010b). On the one hand, the path to a successful sustainable way of working may involve common pool goods, where subsidies for certain sustainability

measures are available for a limited period of time and to a limited number of organisations. As such, this could decrease the likelihood of achieving the net benefits. On the other hand, since sustainability can be considered a public good because it benefits everyone, working together with a large group may therefore increase the chances of achieving it. However, it is important to note that the effects of sustainability are not seen in the short term, but over a long period of time, which affects feelings of commitment as results are not seen immediately. Moreover, sustainability metrics have often not been properly defined, making it difficult to measure the achievement of results (Farri, Cervini and Rosani, 2022).

Third, it is argued that the heterogeneity of participants is negatively related to the achievement of social benefits (Ostrom, 2010b). One reason for this is that greater heterogeneity of participants leads to higher transaction costs and could lead to conflict over the distribution of benefits and costs (Ostrom, 2009). Heterogeneity of participants can also have a strong influence on the level of trust and cooperation (Ostrom, 2009). However, some also argue that heterogeneity, in the sense that some have stronger interests in a group than others, increases the likelihood of achieving benefits, even if the public good is under-provided (Ostrom, 2009). This is related to the earlier criticism on collective action theory that some invested and resourceful individuals produce the collective action and resulting net benefits, rather than the average individual (Marwell and Oliver, 1993).

Fourth, collective action is more likely to succeed when promises are made in a face-to-face setting rather than an online setting (Ostrom, 2010b). This relates to the idea that individuals are more likely to keep their promises to cooperate, that it is much easier to discuss moral issues while looking others in the eye, and that individuals feel more trust in a face-to-face setting (Ostrom, 2009).

Fifth, the shape of the production function implies that the benefits to others produced by individuals taking action come at a cost to themselves (Ostrom, 2009). For homogeneous groups, the initial contributions will be lower than for heterogeneous groups because they may have more members with higher interests (Ostrom, 2009). Basically, the production function shows the relationship between the input of individuals and the output obtained. This is also relatable to Marwell and Oliver (1993) that collective action is based on individuals who are actively involved rather than average group members who "just join".

3.2.2 | Variables in Repeated Situations

In addition to the five variables that apply to non-repeated situations, Ostrom (2010) identified three variables for repeated situations, namely information about previous actions, the way individuals are linked, and whether individuals can enter or leave the situation voluntarily. Individuals, as mentioned by Ostrom (2010) above, are considered in this paper to be the organisations that have co-authored and signed the GD3.

The first variable applicable to a repeated situation concerns the information that actors have about the past actions of other actors. This information influences the strategy adopted in a repeated game (Ostrom, 2009). The behaviour of actors could lead to certain levels of reputation and trust between some, while it could reduce the latter with others (Ostrom, 2009; Ostrom, 2010b). As such, this has an influence on the cooperation between actors in the new "game". It is a matter of perspective as to what information is available and accurate about actors' behaviour, and thus what the consequences or valuation of these actions are (Ostrom, 2009).

The second variable zooms in on how individuals are connected. This means that if all individuals contribute something directly to each other, their linkages are stronger than if they contribute something to a common pool from which all individuals benefit (Ostrom, 2009). In short, one feels less connected to a common pool compared to direct linkages with other actors. If you simply contribute to a common pool without seeing who, what and how much someone benefits from that contribution, the chances of freeriding increase because the benefits remain the same and it is easier to go unnoticed (Ostrom, 2009).

The final variable identified by Ostrom (2009) for repeated situations concerns free entry and exit. Added to influence on levels of trust and reputation, and finally cooperation, through the behaviour of actors in previous situations, is the component that the capacity to withdraw at any time leads to higher levels of cooperation (Ostrom, 2009; Ostrom, 2010b). Thus, a combination of trust, reputation, and the ability to enter lead to higher levels of cooperation over the years. The latter is true at the scale of hundreds of people, as the level of cooperation is lower at the scale of a thousand people (Ostrom, 2009). A reason for this may be related with higher transaction costs and impact on levels of trust and reputation (Poteete and Ostrom, 2004).

3.2.3 | The Core Relationships

As can be seen in Figure 6, all of the above variables have an impact on 'the core relationships', as defined by Ostrom (2009; 2010). In essence, this means that if an actor has a good reputation for trustworthiness and using positive reciprocity, other actors are more likely to trust this actor and cooperate with that actor (Ostrom, 2009; Ostrom, 2010b). Ultimately, the higher the level of cooperation, the higher the net benefits will be (Ostrom, 2009; Ostrom, 2010b). It also works the other way round. If an actor has a bad reputation due to the use of negative reciprocity, its trustworthiness will be lower and, as a result, other actors will be less likely to trust and cooperate with that actor (Ostrom, 2009; Ostrom, 2010b). As a result, the net benefits will be lower (Ostrom, 2009; Ostrom, 2010b). Moreover, in repeated situations, who initiate cooperation become more trusted and increase reciprocity with other actors, leading to higher levels of cooperation (Ostrom, 2009; Ostrom, 2010b). This means that "reputations for being trustworthy, levels of trust, and reciprocity are positively reinforcing (Ostrom, 2009; Ostrom, 2010b)".

Given that sustainability is a public good, in that the benefits derived are non-rival and non-excludable, the core relationships may be even more important and fragile. Furthermore, given that the problem of climate change is a global phenomenon, the solution should also be a global phenomenon. Ostrom (2010a) herself questions the applicability of traditional collective action theory to climate change, given the lack of pre-existing levels of trust and reciprocity for new problems such as climate change. In this context, Ostrom (2010a) argues that trust and accountability are easier to achieve in smaller groups and contribute as such to the bigger picture. The role of government is highlighted here in the sense that even policies and regulations ultimately depend on the willingness and cooperation of citizens (Ostrom, 2010b).

In relation to the GD3, which is a recurring situation, it is likely that cooperation during the previous Green Deals will be influential. With this in mind, it is interesting to ask why organisations want to pursue goals with others rather than acting individually and selfishly to pursue their own benefits (Willer, 2009). The newness of the climate change problem might be the answer to this (Ostrom, 2010b). Also, the scale of the GD3 and the greater government involvement in this version of the Green Deal Sustainable Healthcare makes it a fascinating case study for all the other agreements being set up around the world to combat climate change. Given all the variables and interdependencies mentioned above, the newness of climate change policies and agreements and the present dynamic form of governance, it is valuable to conduct research on these issues. The following chapters present the results of this research with the aim of filling some of the gaps that currently exist in this area.

4 | From top to bottom

This first section presents the findings on the government's approach to working with non-state actors and how this affects mutual cooperation between GD3 participants at a more ground level.

4.1 | Participatory Governance

As mentioned above, the Dutch government works through a 'Green Deal approach', where it creates Green Deals with industries that are important for the economy to become sustainable (Ganzevles, Potting and Hanemaaijer, 2017). It is worth noting that the first Green Deal Sustainable Healthcare was not a government plan, but rather an initiative from the healthcare sector (MPZ Milieuplatform Zorgsector, 2022b). This contrasts with the GD3, which is published by VWS (Green Deal, 2022b). A VWS representative says: 'Formally, VWS is considered to be the chair of the steering group' (Interviewee 14, Table 2). The interviewee adds that the care organisations want a 'neutral' facilitator, which VWS can provide (Interviewee 14, Table 2). In addition to the facilitating role in the GD3, the national government, as stated on its website, should ensure that different actors come together to reach agreements and learn from each other (Rijksoverheid, 2022b). Thus, actors in the health sector and the national government influence each other through their actions in shaping climate change policy. For example, the second Green Deal Sustainable Healthcare was much more non-committal, whereas this Green Deal "gives more guidance, is more concrete, and it is nice that the fifth pillar has been added" (Interviewee 23, Table 2). Interviewee 1, representing the GZA, adds that they were very keen to add the fifth pillar and are pleased that this has been added to the third version (Table 2). While the healthcare sector initiated the first Green Deal without the involvement of government actors, the Dutch government has been involved in signing and initiating Green Deals since 2011.

In addition to VWS, three other ministries are involved: the Ministry of the Interior and Kingdom Relations, the Ministry of Economic Affairs and Climate, and the Ministry of Infrastructure and Water Management. However, based on the interviews conducted, these three ministries are not very involved in the implementation or facilitation of GD3 nor are they part of the steering group. Interviewee 11, a representative on the steering committee of the GD3, says that certain wishes or requests have to be pushed from VWS to other ministries (Table 2). She wonders, "How do you get the Ministry of Infrastructure and Water Management to make a policy that the water authorities will filter the water properly?" (Table 2). To whom this responsibility belongs, is not clear. Another government organisation mentioned as being involved in GD3 is the Rijksdienst voor Ondernemend Nederland (RvO) (EN: the Netherlands Enterprise Agency).

The RvO is linked to the GD3 through several regulations that organisations must comply with, two of which are discussed here. First, the Energy Efficiency Directive (EED) is

an EU audit requirement for organisations that are not classified as small and medium-sized enterprises (RvO, 2023b). Organisations have to find out every four years what cost-effective energy-saving measures they can implement for buildings, processes and transport (RvO, 2023b). If an organisation also falls under the so-called 'energiebesparingsplicht', which is an energy saving obligation for organisations that consume more than 50,000 kWh of electricity or 25,000 m3 of natural gas, it is required to identify energy consumption and related energy saving measures (RvO, 2023a). Interviewee 3 says: "By 1 December 2023, we will have to report on the energy savings we make, because of the information obligation in the RvO" (Table 2). It is important to note that the EED is not specifically mandatory for healthcare organisations. Related to the first, a second reporting requirement of the RvO is the 'portefeuilleaanpak' (EN: portfolio approach). This approach is also related to the energy savings requirement but is slightly different in that it focuses on the sustainability process of real estate and, more importantly, is only required for organisations with more than 20 buildings in the Netherlands (RvO, 2023c). The portfolio approach is linked to the third pillar of the GD3, which is a 55% reduction in direct CO2 emissions by 2030 and climate neutrality by 2050. Interviewee 3 explains that (s)he integrates all reporting requirements because "I have to do the EED and other energy-saving measures, so I just put that in the report of the portfolio approach of the RvO" (Table 2).

Another government agency mentioned in one of the interviews was the Rijksdienst voor Volksgezondheid en Milieu (RIVM) (EN: National Institute for Public Health and the Environment). Interviewee 2, who is in charge of innovation, communication and sustainability in an elderly care home, says that (s)he is in contact with several actors, including the RIVM, because "they have programmes on sustainable healthcare" (Table 2). It should be noted that the RIVM has not signed the GD3 and therefore does not, as an internal actor, actively contribute to the collaboration on the GD3.

4.2 | Different stages

The GD3 has thus been presented by the VWS, but has been written and signed by many more actors. A list of the signatories of the GD3 until December 2022 has been published by Vergroen de zorg (2022). These actors can be categorised as follows: national government, sectoral associations ranging from hospitals to mental health organisations, umbrella organisations such as TNO, knowledge institutions, healthcare providers, scientific associations, banks, health insurers, manufacturers and wholesalers (Rijksoverheid, 2022a). According to the national government, sectoral associations should raise awareness of sustainability among their members, facilitate working group meetings for cooperation and stimulate the exchange of knowledge (Rijksoverheid, 2022b). Healthcare providers who sign the GD3 must show what they are doing by displaying quality labels and sharing good examples with other institutions (Rijksoverheid, 2022b). Finally, Rijksoverheid (2022b)

mentions ambassadors for sustainable healthcare as leaders of change and presenters of good ideas. These assigned roles are visible or at least agreed upon by the participants in this research. For example, all participants tell that they work with reporting tools or are working to obtain labels as proof of good practice. Interviewee 6, who as a sustainability consultant works for many organisations in the field of elderly care, mentions the role of sector organisation ActiZ in particular: "They are special in that they have a leading role in organising a lot" (Table 2). The special role of ActiZ was mentioned more often in the interviews and is therefore discussed separately below.

4.2.1 | In-Between: ActiZ

Already briefly mentioned is the special role of ActiZ, the sectoral organisation of elderly care organisations in the Netherlands, which represents about 400 organisations (ActiZ, 2023b). ActiZ has translated the five pillars, as generally described in the GD3, into implementation plans for its members. Interviewee 7, who works for the Salvation Army, says that "ActiZ is working on the implementation plans" (Table 2). Interviewee 23, a sustainability advisor at tanteLouise, adds that she was invited to the ActiZ think tank to help write the implementation plans (Table 2). Interviewee 6, a sustainability consultant for several elderly care organisations, adds that "they gave an explanation, a kind of background to the five pillars of the GD3" (Table 2). (S)he elaborates on the role (s)he sees for ActiZ in terms of "being active in raising awareness" and "making it easier for other organisations to achieve the goals set out in the GD3" (Table 2). In summary, ActiZ fulfils a facilitating role for elderly care organisations in achieving the goals set out in the GD3. Interviewee 17, who is a representative of ActiZ, states that ActiZ should bring together different parties and set the standard for all its members (Table 2). While many interviewees appreciate ActiZ, Interviewee 3 suggests that "it would be nice if ActiZ and the RvO would just coordinate what they do better, so that it is more aligned" (Table 2). Interviewee 3 refers to the different obligations and frameworks of the different organisations, which are complementary to one another but also different (Table 2). In this case, (s)he is talking about the mandatory EED reporting from the RvO and the non-mandatory but considered useful toolkit for ActiZ members (Table 2).

ActiZ acts as a sector organisation between the national government and the local elderly care organisations. This leads to a strategic position in which, on the one hand, ActiZ can translate policy and support its members in the transition to a sustainable future, while at the same time "they are also our voice in influencing government policy (Interviewee 3)" (Table 2). More explicitly on the first point, ActiZ states that they focus on active knowledge-sharing among members, providing a toolkit for members, sharing tips and examples from other (healthcare) organisations to act fast, and making sustainability a recurring theme as much as possible in various membership meetings, governance bodies and (multi-)annual objectives (ActiZ, 2022a). An example of sharing stories from other elderly care organisations is an interview with someone from the elderly care home

Pennemes, also involved in this research, where sustainability intersects with the vitality and greening of the whole organisation and location (ActiZ, 2023a). This story highlights that greening can take different forms, such as purifying the air, equipping the building with beehives, and allowing pets (ActiZ, 2023a). The innovation consultant from Pennemes concludes by saying that starting with something simple, increases the enthusiasm for going green (ActiZ, 2023a). In addition to providing insights from one organisation to another, which is seen as the other end of their role, ActiZ recognises the importance of representing the elderly care sector in discussions with government actors, insurers, and banks (ActiZ, 2022a). Interviewee 17 recognises that "especially with this kind of big change, the input of all stakeholders and levels should be present and there should be rounds of feedback both before and after so that the whole system is involved" (Table 2). System involvement and the how-to are emphasised in the GD3 as well as in the IZA.

ActiZ, thus, has a facilitating role in connecting different organisations in the field of elderly care, providing a platform with information on 'hot topics' in elderly care and putting important issues on the agenda of the national government (ActiZ, 2023). The interplay between these levels creates an interesting position. Finally, the ActiZ's as co-author and signatory of the GD3 means that "the other elderly care organisations have also indirectly signed the GD3 as well" (Interviewee 23, Table 2). In this way, ActiZ also disseminates the five pillars of the GD3 and sustainability issues in general to its network.

4.2.2 | Shared governance: An hourglass figure

For the healthcare organisations that have co-authored and signed the GD3, it is clear that sustainability measures need to be taken. The question remains, however, how to get everyone involved? According to the national government, as stated in the IZA, different people working in healthcare organisations need to be involved, which is called 'shared governance' (ActiZ et al., 2022). This means that it is not just the directors who sign the GD3, but the whole organisation must be actively involved, including staff, clients, commissioners and collaborators (ActiZ et al., 2022). Employees, in particular, are seen as important in the decision-making process and in the implementation of (sustainability) plans. An interesting addition to the latter point in the IZA is that the term 'shared governance' is used predominantly with regard to *regional plans* and *regional care* (ActiZ et al., 2022). This suggests that from a national perspective, the government wants regional rather than national collaboration. This was also evident in many of the interviews, the most obvious being the partnership of 12 care organisations in North Brabant who signed the GD3 collectively.

Interviewee 17 says that working together helps to "present to the government what you are doing as a sector; to make it visible to others" (Table 2). In addition, Interviewee 22 and Interviewee 21 from the elderly care organisation WIJdezorg mention that working together at regional level is useful because you are close to each other and it is better to have a good neighbour than a distant friend (Table 2). Furthermore, if you work

together within the same province, you have to follow the same provincial rules and regulations. An example of this is waste separation, where the rules vary from municipality to municipality and may also vary between households and businesses. In such a situation, it can be very useful to contact other organisations and see how they do things. In addition, the elderly care sector in the Netherlands is already organised on the basis of 'zorgkantoor' regions. Related to the previous point, this also means that every organisation has to follow the same rules, which are drawn up by the 'zorgkantoor' of each region. Interviewee 2 thinks this is a great mechanism because each zorgkantoor can set guidelines, for example on procurement criteria, which each care organisation must follow (Table 2).

An interesting vision and perceived challenge of current collaboratives is the need to align with many different people and organisations. Interviewee 17 points out that the so-called 'old boys network' had one great advantage, along with many disadvantages, which was consistency and agreement within the regions (Table 2). One person fulfilling several roles creates coherence. However, it tends to make it more difficult for others, for new visions to emerge and for change to take place. Interviewee 17 is very active in several groups, organisations, and consultative bodies, making him an initiator on many fronts (Table 2). Having initiators like Interviewee 17 is seen as important by many participants. A good example of this is given by Interviewee 12 from AxionContinu, who describes a situation where "a facilities and property manager retired, which led to stagnation for a while" (Table 2). Dependence on individuals is therefore common, but it is questionable whether this is desirable, as changing the behaviour of an entire system cannot rely on one person.

Thus, policies and plans made at the national government level are cascaded down through regional collaboratives and (elderly) care organisations to individual households. Conversely, individuals also provide initiatives and feedback to the national government through the organisations they work for and sector organisation ActiZ. Interviewee 12 says (s)he has a monthly consultation with MPZ to discuss what should be done and what is happening within the organisation (Table 2). This is not explicitly related to achieving the goals set out in GD3, but rather focuses on the sustainability actions being taken within the organisation and whether these are genuinely contributing to sustainable development. Contributing to sustainable development obviously contributes to the goals of the GD3, but these are not the only goals set in a particular framework. Other frameworks and how they relate to the GD3 are discussed below.

4.3 | Relatable frameworks to the Green Deal

Although the GD3 is the main focus of this research, it relates to many other frameworks, which are used by elderly care organisations. The following frameworks emerged during this research and are therefore of interest.

Starting with the most frequently mentioned one, the 'Milieuthermometer zorg (MTZ)', also known as the 'Environmental Thermometer for Healthcare', which was developed by the Milieuplatform Zorg (MPZ). The MTZ is both a framework and a certification programme for healthcare professionals to facilitate sustainable management within their organisation (MPZ, 2023a). The MTZ has several functions. First, the MTZ provides concrete measures for organisations to transform their current practices into sustainable ones. For example, Interviewee 9, who started working on sustainability in 2019, says "the MTZ actually is a clear overview and list of requirements to which each different location belonging to your organisation must comply to" (Table 2). The MTZ is closely related to the five pillars in the GD3 but more extensively, as it focuses on energy (efficiency), (waste) water, waste separation, cleaning, property and innovation (Milieukeur, n.d.). A healthcare organisation must meet at least a certain number of requirements to be certified. An organisation can aim for a bronze, silver or gold level of certification (MPZ, 2023b). The bronze level means that an organisation is making a little more effort than necessary to comply with environmental legislation (MPZ, 2023b). For Interviewee 7 and Interviewee 16, complying to environmental legislation was enough for this year "as a starting point" (Table 2) . The silver level adds to the bronze level by including sustainable procurement. An organisation reaches the gold level of the MTZ if it includes sustainable construction and transparent reporting. Interviewee 12 says (s)he does not care about which level his organisation accomplishes because "it is about having something to hold on to and to work towards something together" (Table 2). Also, once you achieved a certain level you have to maintain it and thus secure it in the organisation (Interviewee 22 and Interviewee 21, Table 2. Second, the MTZ can be used as a baseline measurement so an organisation knows what is going well and what still needs to be done (Interviewee 23, Table 2).

A criticism of the MTZ was mentioned by Interviewee 8, "the audit trajectory and the certificates are quite expensive, if you ask me" (Table 2). For an elderly care institution, the following costs apply, see Table 2.

Table 2: *An overview of all the costs that apply for elderly care organisations based on the number of beds in an organisation (MPZ Milieuplatform Zorgsector, 2022a)*

Annual contribution per non-hospital location	€ Excluding tax	Surcharge golden € excluding tax	Surcharge non-MPZ-member € excluding tax
Healthcare institution with < 200 beds	€250	€150	€100
Healthcare institutions with 200 < 400 beds	€300	€150	€150

Healthcare institutions with 400 < 1000 beds	€350	€150	€200
Healthcare institutions with 1000 < 2500 beds	€500	€150	€250
Healthcare institutions with > 2500 beds	€650	€150	€300

According to many participants, the MTZ is complementary to the GD3 as it provides a structured framework for organisations to implement sustainable practices and track improvements. It is generally agreed that if you are compliant with the MTZ, even the bronze level, you can assume that you are also compliant with the GD3. This should be understandable as the MTZ was developed by MPZ in collaboration with Stichting Milieukeur (MPZ Milieuplatform Zorg, 2023a), and MPZ was also the facilitator of the first Green Deal and is still one of the co-authors of the GD3.
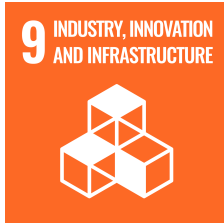
In addition to the MTZ, which is a framework for the implementation of sustainability measures, there are several EU and UN frameworks and regulations that are in use or about to be introduced. These are the Environmental, Social, and Governance (ESG) framework, the Sustainable Development Goals (SDGs), and the Corporate Sustainability Reporting Directive (CSRD), which will be discussed respectively.

ESG reporting frameworks are used by different organisations to map their operations and processes against three main criteria. First, the environmental criterion concerns an organisation's impact on the environment and plans to reduce its carbon footprint (ACG Advocacy, 2022). Second, the social criterion involves focusing on the relationship with local communities, the relationship with other organisations and the relationship between employees, stakeholders and workers (ACG Advocacy, 2022). Thirdly, the corporate governance criterion focuses on the company's internal processes, such as (un)ethical behaviour and board composition (ACG Advocacy, 2022). Interviewee 3 compares the ESG with corporate social responsibility "but without obligations" (Table 2). Reporting is essential because you can only measure improvement if you know what the starting point is. As such, ESG reporting contributes to the achievement of the GD3 objectives in the sense that it helps to visualise and establish baseline measurements, resulting in a clear indication of the current situation from which it is possible to reason backwards whether the objectives have been achieved.

Second, the SDGs are seventeen goals initiated by the UN, and adopted by all its member states in 2015, to partner globally in order to end poverty, "improve health and education, reduce inequality, and spur economic growth - all while tackling climate change and working to preserve our oceans and forests" (United Nations, 2023b). Interviewee 11 says they have created a wardrobe with some SDGs and have now added the ESGs as well as the five pillars of GD3 (Table 2). She says it is nice to have these frameworks to show

people what you are doing, why and what impact one can have (Table 2). While it can be argued that all seventeen objectives ultimately contribute to environmental sustainability, only some are obviously related and well connected to the GD3 (see Table 3).

Table 3*: Link between GD3 and SDGs (Images of the SDGs (United Nations, 2023a))*

General	11 - Sustainable Cities and Communities 13 - Climate Action
I. Greater commitment to health	3 - Good Health and Well-Being
II. Increasing awareness and knowledge	4 - Quality Education
III. 55% reduction in direct CO2 emissions by 2030 and climate neutral by 2050	7 - Affordable and Clean Energy 9 - Industry, Innovation and Infrastructure
IV. 50% reduction in primary resource use by 2030 compared to 2016 and maximum circular healthcare by 2050	6 - Clean Water and Sanitation 12 - Responsible Consumption and Production

	6 CLEAN WATER AND SANITATION **12 RESPONSIBLE CONSUMPTION AND PRODUCTION**
V. Reducing the environmental impact of medication (use)	

Finally, the CSRD, which is not in use yet, was proposed by the European Commission in 2021 to force companies to report their climate and social impact of operations (Waninge, 2022). The CSRD is an EU directive on sustainability reporting focused on improving the transparency in the sustainability practices of companies and is also a core element of the EGD (Baumüller and Grbenic, 2021). The CSRD is mentioned by participants in terms of a reporting tool, that is according to Interviewee 3, going to replace the ESG (Table 2). It would make sense that only one of these frameworks is going to be used as the CSRD is just like the ESG, a directive meant for reporting purposes. The CSRD is therefore, just like the ESG, complementary to the GD3 as it helps to set a baseline

Some of these frameworks are only used as a contextual or communication tool, while others are seen as practical for implementing sustainability measures. However, some feel that there are too many frameworks. Interviewee 12 says: "At a certain point we could not see the wood for the trees" (Table 2). (S)he adds that the MTZ was a relief in terms of a stable instrument that provided good handles for implementing sustainability measures (Table 2). Taking all this into account, it is clear that GD3 operates in a landscape of other frameworks and commitments in a network of numerous actors. From external influences, we now turn to the internal framework of the GD3 and the cooperation between actors within this framework.

5 | Unravelling collective action on stage

From the dynamics of governance and correlating frameworks to the GD3, we now move to collective action within the GD3 itself. This means that, based on the variables defined by Ostrom (2009; 2010) in the theoretical framework, the cooperation between the different actors in the GD3 is analysed and the results are presented here.

5.1 | Collective action variables applied to the GD3

The collective action variables described by Ostrom (2009; 2010) are used to analyse cooperation, and in this case the level of cooperation between the actors involved in the GD3. First, the results based on the structural variables, which are independent of a repeated situation are discussed. Second, the results based on the additional variables applicable to repeated situations are highlighted.

5.1.1 | Structural variables independent of a repeated situation

Elinor Ostrom (2009; 2010) identified five structural variables that are independent of whether a situation is repeated. These five are the number of participants involved, subtractive or common resources, heterogeneity of participants, face-to-face communication and the form of the production function. Each of these variables will be discussed according to the findings of this research.

5.1.1.1 | Number of Participants Involved

Figure 7: *Map of the Netherlands with the participating elderly care organisations.*

The number of participants involved in the GD3 is significant. 15 organisations have co-authored the GD3 and more than 150 (healthcare) organisations have signed the GD3 (Green Deal Duurzame Zorg, 2023). These are organisations in the categories as visualised in Figure 4. Concerning elderly care organisations, 38 organisations signed the GD3 in December 2022 (ActiZ, 2022b). These 38 organisations can be divided into two groups, the individual organisations and the collaborative "Iedereen Zorgt"

consisting of 13 elderly care organisations based in North Brabant. The collaborative "Iedereen Zorgt" is a partnership of 13 elderly care organisations in the province of North Brabant that have signed the GD3 together and have joined forces to act on climate change. The map in Figure 7 shows where all the different participants are located. This is true for the elderly care organisations, which means that the authors of the GD3 are not included in this map.

5.1.1.2 | Subtractive or shared resources

The variable resources can be interpreted from different perspectives. From a broad perspective, sustainability can be seen as a public good, as it is available to and enjoyed by all members of society. From a narrower perspective, the path to a successful sustainable way of working may involve both public goods and common pool goods.

One of the benefits of collaboration is the sharing of knowledge, which can be considered a public good as it is openly available to all. The second pillar of the GD3 is 'raising awareness and knowledge', which is applied in a variety of ways. In the 'Groene Zorg Podcast' (Green Healthcare Podcast), initiators of green healthcare talk about ways to improve the current system and give tips to others on steps that can be taken immediately (Brakema and De Bree (hosts), 2023). On LinkedIn, Ernst Kuipers dedicated every week for almost three months to posts about sustainability (initiatives), mainly to show examples of people and organisations in the healthcare sector working in a green way (Kuipers, 2022). Sustainability in general is a hot topic on LinkedIn. People showcase their sustainable initiatives and connect with each other to gain knowledge and information, and connect with others to share their stories and ideas on how to become sustainable. In this context, it is interesting to note that the 'Green Deal Sustainable Healthcare' group is almost inactive. In addition, the regular "Green Deal Samen werken aan duurzame zorg", which translates as "Green Deal Working together on sustainable healthcare", last posted six months ago (Green Deal Samen werken aan duurzame zorg, 2022). ActiZ provides knowledge and information to its members and has a sustainability group or platform where sustainability advisors from organisations can meet and exchange ideas (Interviewee 22, Table 2). Interviewee 2 says that "it is a big knowledge base that we are building" (Table 2). However, Interviewee 2 adds that (s)he thinks it is nice, but that it lacks "focus and purpose" (Table 2). Interviewee 16 recognises the importance of a knowledge base but also says that (s)he has asked "someone to guide me through the library because it is a lot and you just need to find the right information" (Table 2). Interviewee 24 is keen for knowledge to be shared as she says that the change process is slow because there are too many people who lack knowledge (Table 2). So while it seems good that knowledge is shared, it is also seen as important to act (quickly) on the knowledge gained.

Both an advantage and a disadvantage of collaboration is financial support in the form of grants. Grants for specific sustainability actions are available for a limited period of time and to a limited number of organisations (Interviewee 4, Table 2), making them

common pool goods. Interviewee 20 conveys that "there are several pots of money and grants for climate change, but finding the way to the money and grants is incredibly complicated. Especially for certain health institutions" (Table 2). Interviewee 20 does not specify which type of organisation has more difficulty in finding funding. Still, many participants confirm what Interviewee 20 says, as some say they miss out on certain grants, while others say they know where to go and who to ask to get the money. For example, Interviewee 18 says that (s)he would like to see some additional grants, as the grants from the national government are considered minimal (Table 2). So the disadvantage is that working together could mean that everyone knows about certain grants and some people and their organisations miss out. An advantage is that some can show others how to get the money, as it is not always clear.

5.1.1.3 | Heterogeneity of participants

Looking at all the signatories of the GD3, the first thing emerges is a heterogeneity of participants. However, there are also differences within the organisations that have signed the GD3. One difference between the different elderly care organisations is their size and vision. At IJsselheem, a care organisation in the province of Overijssel, they have just started with sustainability initiatives, whereas at Pennemes the whole organisation is concerned with a green living environment. The reason for these differences is ambiguous in the sense that it could be the organisation that feels the urge to do something about sustainability, but more often it is individuals who feel the need to integrate sustainability into their working environment. These people are the initiators and leaders who get others involved and get things moving.

Ultimately, it is behaviour change that is needed to create a successful sustainable system. Interviewee 19 says that the behaviour change, or at least the initiation to do things differently from what everyone is used to, lies with certain people (Table 2). She then wonders: "but maybe this is always the case" (Table 2). Interviewee 12 and Interviewee 21 say that you have to want to change and become sustainable with all your heart and soul (Table 2). At the same time, it is often stressed that people in the workplace are ready for the big change. Interviewee 20, who is responsible for sustainability at Rivas, says: "The workplace is totally ready to go green" (Table 2). Interviewee 18, manager of a large care organisation in the province of Brabant, agrees: "Everyone is motivated, everyone wants to" (Table 2). But it is not all set and ready. Interviewee 17 says: "Solar panels are easy to buy, but people do not just change" (Table 2). This relates to what Interviewee 12 and Interviewee 21 mentioned earlier, that being intrinsically motivated, will not be the case for everyone in the organisation (Table 2). So shared governance could help in terms of initiators taking others by the hand and, as Interviewee 17 says, "infecting others with the enthusiasm of the change-makers in the organisation" (Table 2). Another strategy mentioned is to slowly get people used to doing things differently or to prepare them to act differently in the near future. Interviewee 21, from WIJdezorg, and Interviewee 18, from

Pantein, both say that they let staff practice with separating incontinence material so that when there is an opportunity to process this type of waste, it can be implemented immediately (Table 2). Interviewee 19 suggests that it is all about eduction: "Just learning to look differently, to think differently, to work differently in healthcare" (Table 2).

Whether one person or a small group of people can actually make a difference depends on many factors. The people involved in this research have at least ensured that they can and do work on sustainability within the organisation. The advantage of working together through the GD3 is that everyone involved is committed to sustainability and focused on change processes. However, the different paths that can be taken to sustainability and the diversity of individuals within organisations make it less likely that benefits will be achieved because of the heterogeneity of options.

5.1.1.4 | Face-to-face communication

The process of developing, signing and implementing the GD3 was an online and offline process. Interviewee 1, who is involved in an industry-wide organisation that actively lobbies and campaigns for sustainable healthcare, says that the writing process involved a small group of representatives (Table 2); whether this writing process took place physically is not clear. She says that they tried to be as concrete as possible and considers the GD3 to be "a very nice concept", but adds that it is not a legal obligation, so "you can call each other on it, but not much else happens" (Table 2). Something that contributes to the level of responsibility and accountability is that the signing of the GD3 was live on 8 December 2022 (ActiZ, 2022b). The signing of the GD3 received a lot of attention, with an article dedicated to the signing on the websites of almost all the orgniasations involved, LinkedIn full of posts about the signing, and many newspapers writing about it. In addition to all the texts written about the signing of the GD3, many photos were taken and published (ActiZ, 2022b) and some videos were made (MPZ - Milieu Platform Zorgsector, 2022). Thus, at least the representatives of the organisations that co-authored and signed the GD3 were in a face-to-face setting when they made the commitment to actively participate in achieving the goals of the GD3. However, most of the people working on the GD3 goals are not the directors of the organisations but other people who have sustainability in their portfolio.

Some other forms of offline meetings concern heydeys, in-check and advisory meetings. According to Interviewee 14, the steering committee "meets about four times a year" (Table 2). During the meetings, the steering committee discusses whether everything is going well, what the problems and bottlenecks are and what the concrete action points are (Interviewee 14, Table 2). ActiZ, the sector organisation, also organises quarterly national meetings to discuss sustainability issues (Interviewee 17, Table 2). Interviewee 8 says that they have links with other elderly care organisations in the province of Limburg and send a delegate from their regional association to the national meeting to discuss with the region a week later what came out of it (Table 2). One reason for sending a delegate is partly related to sustainability, as they try to minimise the travel time, costs and CO_2

emissions (Interviewee 8, Table 2). Interviewee 19 also says that the IZA encourages organisations to work in a regional collaboration, which leads to quarterly meetings for organisations in her region (Table 2). Interviewee 12 mentions that there is a knowledge community in the province of Utrecht, which (s)he has joined as a representative of his organisation where they meet every two months or so to "discuss various sustainability issues, talk about the MTZ, but also about transport and grants" (Table 2). This suggests that face-to-face communication is important for GD3 participation at both national and regional level. In addition to all these face-to-face meetings, ActiZ also provides an online platform where people can share knowledge and information, and to get in touch with each other (Interviewee 22, Table 2). It is also mentioned that video calls are easy to arrange these days and save time, costs, and CO_2-emissions.

5.1.1.5 | Shape of the production function

Given the heterogeneity of the group co-authoring and signing the GD3, and the evolution of the Green Deal from a bottom-up initiative to dynamic governance, the initial investment could be considered high. As the GD3 is in its early stages, it is difficult to say anything about the output. What could be said is that the initial contributions are high, as the first and second Green Deal Sustainable Healthcare were initiated bottom-up by the healthcare sector itself (MPZ Milieuplatform Zorg, 2022b). Considering the addition and involvement of the national government, in particular the Ministry of VWS, in the third version of the Green Deal Sustainable Healthcare the initial contribution of all participants can still be considered high.

5.1.2 | Additional structural variables (repetition of the situation)

The GD3 is the third version of the Green Deal Sustainable Healthcare, creating a situation that is repeated from two previous times. Therefore, the results of the information on previous actions, the linkage structure of co-authors and signatories, and the freedom to enter or exit the agreement are discussed.

5.1.2.1 | Information about past actions

As this research focuses on the third version of the Green Deal Sustainable Healthcare, the information on past actions consists to a large extent of how actors acted in relation to the first and the second Green Deal Sustainable Healthcare. An important result of the first Green Deal Sustainable Healthcare is that 104 healthcare organisations started with the MTZ (MPZ Milieuplatform Zorg, 2023c). As the MTZ is a factual and clear reporting, and as such measurement tool, the contributions to the MTZ requirements and therefore sustainability measures should be visible. However, Interviewee 2 says that there has been a reflection on the results of the first Green Deal, but there has also been "a lot of chatter and a lot of roundabout text; so that the message disappears" (Table 2). This is in line with Interviewee 20, who says that she wants to be "wary of getting into all sorts of fixed clubs,

because before you know it you are just talking" (Table 2). This is something that comes up quite often. Interviewee 20 says that there is a bit of a lack of actionability, or rather that the GD3 document is "for the show" as it is "not binding because you cannot be legally bound by the things in it" (Table 2). Interviewee 22, Interviewee 7 and Interviewee 3 all explicitly say that the GD3 and the big presentation of the signature are just for the show (Table 2). However, Interviewee 20 also says that once one organisation joins, other organisations follow, which although to some extent sets things in motion (Table 2). Interviewee 19 experienced the same thing with the cooperation of 'Iedereen Zorgt', where some organisations were eager to get their signatories on the GD3, while others had more doubts in the sense of "don't we want to know the content of this version of the Green Deal before we sign it?" (Table 2). This particular example shows that not everyone was immediately convinced that signing was a good idea. Ultimately, given the large number of actors who signed the GD3, the previous actions around the first and second Green Deals were not as dissuasive, which in turn, might again may be related to the non-binding element of this agreement.

5.1.2.2 | Linkage structure

As noted above, the majority of organisations signed the GD3 individually and 13 organisations signed the GD3 collectively. This means that the latter organisations have a different and probably closer relationship with each other than with other organisations. As already mentioned, there is more than just this regional cooperation, as Interviewee 22 and Interviewee 21 mentioned that they cooperate with other organisations in the province of Zuid-Holland, Interviewee 8 highlighted the cooperation in Limburg and Interviewee 12 and Interviewee 13 elaborated on the cooperation in the province of Utrecht (Table 2). Thus, while the GD3 involves a national network of health organisations, the cooperation and links between organisations are more regionally oriented. This is more in line with the IZA, which emphasises and encourages cooperation at a regional level (ActiZ et al., 2022). Nevertheless, it is open to all organisations and representatives accessible to join platforms and groups facilitated by for example ActiZ or MPZ and share experiences (Interviewee 24, Table 2), but it is up to people themselves to set up a regional co-operative.

However, from a broad perspective, organisations are not required to provide much input or output for the GD3. This is because nothing is compulsory. As such, the output of sustainability and taking sustainability actions is not binding, which can lead to freeriding or not being able to achieve the goals as set in the GD3. Some participants say that the targets are easy to achieve, while others question whether this will be the case. Interviewee 17 says that at the moment it is easy to get away with not meeting the targets, but "the tone is changing" (Table 2). Interviewee 4 doubts that her organisation will be able to meet the targets as they have only just started with the greening transition (Table 2). In addition, Interviewee 3 paraphrases ActiZ by saying that much more money is needed to achieve the GD3 targets (Table 2; ActiZ et al., 2023). As is clear here, ActiZ acts as a lobbying, facilitating,

and binding actor for the elderly care organisations. As ActiZ represents more than 400 organisations and more than 150 organisations have signed the GD3, it is hardly possible for one organisation to be in contact with all of the others.

5.1.2.3 | Freedom to enter or to exit

The GD3 can be signed and joined throughout the duration of the GD3 (Ministerie van Volksgezondheid, Welzijn en Sport, 2022). New parties can join the GD3, but the Steering Committee and the national governor decide on this entry (Ministerie van Volksgezondheid, Welzijn en Sport, 2022). Since the signing of the GD3 on 8 December 2023, a number of other elderly care organisations have joined the agreement, which are excluded from this research due to their late signing, but are worth mentioning: Actifaid, Cordaan, Land van Horne, Magentazorg, Park Zuiderhout, Rijnhoven, SVRZ, Tangenborgh, Thebe, Wulverhorst, Zorgpartners Midden-Holland, Zorggroep Zaanstreek and Zorgbureau Endless (Green Deal Duurzame Zorg, 2023). Just as organisations are free to join the GD3, they are also free to leave, subject to three months' notice must be given to the Steering Committee (Ministerie van Volksgezondheid, Welzijn en Sport, 2022). As already mentioned, there are no obligations and nothing is mandatory in the GD3. Therefore, there is already a lot of freedom within the GD3 agreement.

## 5.2 | The Core (Inter)Relationships

The link between the different actors in the collaboration varies from actor to actor, but there are some similarities. For example, Interviewee 18 mentions that his organisation signed the GD3 because they felt it was important to show "that you are motivated in order to comply" (Table 2). (S)he goes on to say that other (interest) groups or organisations will notice something about an organisation that signs or does not sign the GD3, and "that could lead to reputational damage" (Table 2). For Interviewee 18, signing the Green Deal was a conscious decision, which means that you really have to do something (Table 2), because there are reputational consequences if you sign but do nothing. While Interviewee 18 was the only participant who directly mentioned reputation and reputational damage as something (s)he had thought about, (s)he did not feel any competition to get ahead of others, whereas other participants did not mention reputational damage but did feel some form of competition (Table 2). Interviewee 17, one of the managers involved in the North Brabant regional association, says that "the one time our consultant gave me an overview of where everyone was in terms of sustainability, we were not the furthest ahead, and I was disappointed about that anyway" (Table 2). (S)he smiles and adds that "maybe that is what it takes too, a bit of wear and tear and competition" (Table 2). Looking at others and feeling a kind of pressure to react to the behaviour of others is something that comes up more often. As has been mentioned above, some actors signed the GD3 because they felt social pressure and responsibility to do so. For many, being in a cooperative environment through the GD3 and being able to surround themselves with like-minded people makes it very easy

to see what others are doing and means that "that you have something to gain from each other" (Interviewee 23, Table 2). Thus, the fact that there is reciprocal relationship between actors leads to effective cooperation. If both parties gain something from each other, their partnership can be considered highly successful.

It is important to note that participants cite a lack of financial and human resources as an obstacle to the ability and capacity to take action in their organisations. Interviewee 13 simply states that "people are very busy, financially it is not a cash cow" (Table 2). Interviewee 18 agrees with this statement when (s)he says that "without additional financial support, you will not achieve the goals in 2030" (Table 2). Interviewee 10, the representative of MPZ, the provider of the MTZ tool, points out that "everyone says they lack financial resources", but in his opinion it is not about money, rather "in the end people decide what happens and if they want something, then there is money" (Table 2). Interviewee 9 disagrees, saying that "everyone is very enthusiastic, I do not see any obstacles other than money to get things going" (Table 2). It becomes clear that there are different opinions about whether there is a lack or an abundance of financial and human resources. This is linked to the fact that we have just had three years in which the COVID crisis has dominated society. Some, like Interviewee 2, say that we cannot wait for the right time to do something about climate change because there is no perfect moment: "We have had the financial crisis, the COVID crisis, staff shortages. You cannot wait" (Table 2). Interviewee 1 agrees, saying that "during the COVID crisis everything was possible, the whole money tap was opened, but that is a relatively small crisis to what we are facing with the climate crisis" (Table 2). Nevertheless, Interviewee 19 says that sustainability was simply not a priority during the COVID crisis (Table 2). However, she says that one benefit of the COVID crisis was that cooperation intensified and is still strong because "you just needed each other" (Table 2). Interviewee 11 also mentions that another notable 'benefit' of the COVID crisis was that the environmental impact of the healthcare sector became extremely visible (Table 2). In this sense, everyone involved in this research has a strong sense that something needs to be done.

Signing a Green Deal is one thing, acting on it is another. Because the GD3 is seen as a broad and general guideline for the transition to sustainability, organisations mainly use the MTZ tool to take action. According to Interviewee 10, the biggest environmental impacts in the healthcare sector are energy, property, mobility/transport, sustainable procurement, and the use and waste of medicines (Table 2). As a result, elderly care organisations are taking sustainability measures into account as visualised in Figure 8.

Figure 8: *The most frequently reported actions taken or planned to improve the sustainability of organisations*
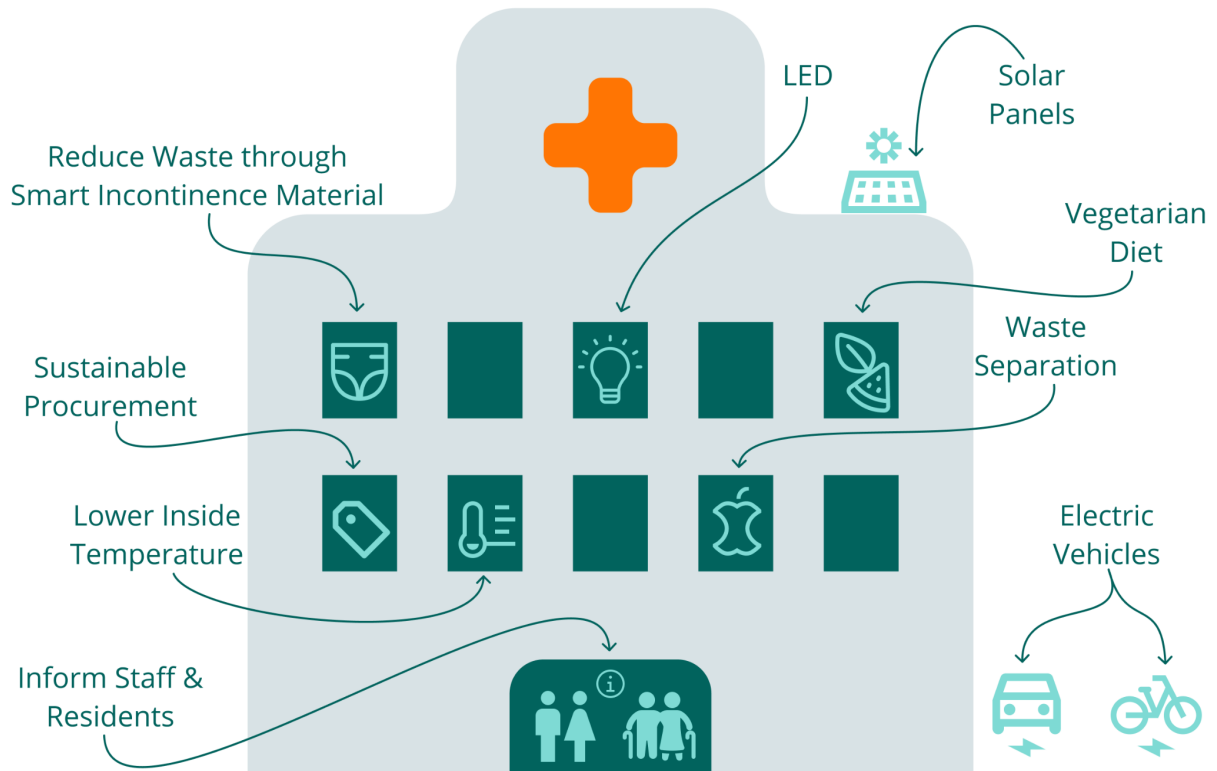
Most of these measures were not developed by people within the organisations themselves ([Figure 8]). One of the great benefits of having so many organisations involved in the GD3 is that "you can look at others and see what works. If it works, you can copy and paste it into your own organisation" (Interviewee 13, [Table 2]). This requires a degree of trust that what others are doing is the right thing to do. However, most organisations feel that time is ticking and that efficiency requires not only looking at others but also working with them to share information, knowledge and resources. Whether this happens at a national or regional level is ultimately irrelevant, as long as it contributes to the bigger picture.

6 | Discussion

In order to answer the question of how joining the GD3 helps elderly care organisations to achieve their sustainability goals, I conducted 19 interviews with representatives of organisations that have co-authored or signed the GD3. I asked questions about the benefits of joining the GD3, collaboration between actors, concrete actions resulting from collaboration and possible challenges, which ultimately led to all the findings described in the two chapters above. I now relate these findings to the theoretical framework in order to draw a conclusion. The conclusion is the answer to the main research question, which is: how does joining the GD3 help elderly care organisations to achieve their sustainability goals? Finally, I present the contribution of this research to the academic literature and make recommendations for future research.

6.1 | Shared governance in different spheres

Unlike the first and second versions of the Green Deal Sustainable Healthcare, the GD3 is presented by the Ministry of VWS, but still in close collaboration with the co-authoring actors. As such, it is not a strictly top-down approach, but rather a dynamic or shared form of governance. Shared governance can be seen as useful in the case of the Green Deal because the input of the participants is so important that it increases the chances of getting everyone on board. The reasoning is as follows: if you want maximum participation, it is extremely helpful if what is decided has been developed by the people who will have to deal with and act on the decisions made.

Shared governance is applied to regional cooperation in the IZA (ActiZ et al., 2022). Although the GD3 is a national agreement and there is cooperation at this level, it is actually made up of many smaller regional partnerships. Almost all the organisations involved in this research cooperate with other organisations in their region up to the provincial level. The cooperation in this case is between organisations providing care for the elderly as well as other healthcare providers, which is comparable to the involvement of all types of healthcare providers in the GD3. These regional partnerships are beneficial for increasing the likelihood of achieving the goals set out in the GD3 for two reasons. First, reducing the number of actors involved in a collaboration reduces transaction costs because there are fewer parties to deal with (Ostrom, 2009; 2010b). Second, the likelihood of freeriding going unnoticed is reduced because it is easier to monitor the contributions of 10 organisations than 100 (Ostrom, 2009; 2010b). However, if organisations choose not to collaborate with other organisations, they may still go unnoticed in the big picture. However, as the participating organisations are publicly named and easily searchable, it could lead to reputational damage if an organisation commits to sustainability goals but does not actively act on them. Given that all of these regional partnerships emerge and operate within the larger national framework of GD3, the chances of success for the final goal are increased by reducing the collective action problems described above, but also by having more

resources available. The latter is one of the few positive consequences of an increasing number of organisations as mentioned by Ostrom (2009; 2010b). It can therefore be concluded that the more participants there are, the greater the chances of achieving the goals set out in the GD3 if smaller groups of organisations, whether or not regional oriented, work together within a larger framework.

In addition to the principle of shared governance at the regional level, the IZA applies the principle of shared governance to the organisation itself, which means that internal cooperation should also involve several representatives from different departments in order to successfully implement major changes such as sustainability measures (ActiZ et al, 2022). The involvement and commitment of people working at many different levels of the organisation is necessary for behaviour change, because it is about people acting sustainably, for example by separating waste, making different food choices and turning off lights when leaving a room. Shared governance is effective when you want things to flow, which in this case means that the things described in GD3 slowly trickle down through organisations to employees and their households. An important factor here is that representatives need to be enthusiastic and leaders need to get others involved. It is like putting on a play: the words flow more naturally if the actor has some freedom to use his own words and personal style, which makes it more likely that the audience will pick things up and take them home. Sustainability policies flow more naturally when an organisation has some freedom to choose its own style and pace that suits its organisational values, its employees and its residents.

In this multi-layered context, the sector organisation ActiZ acts as an intermediary between the national government and the individual organisations providing care for the elderly. On the one hand, ActiZ talks to government actors in order to steer policy and request financial resources based on the needs expressed by the elderly care organisations. On the other hand, ActiZ provides knowledge and information to its members, translates government policies into concrete implementation plans and provides a platform where members can interact with each other. This is also reflected in their dual role as co-authors and signatories, as they have a say in what ends up in the GD3 and sign it on behalf of their members. However, it can be argued that it is also important for individual organisations to sign the GD3, as this gives visibility and strength to their direct climate efforts and intentions, both externally and to people within the organisation. In conclusion, the dual role of ActiZ as co-author and signatory can be seen as beneficial because it works in two directions, upwards to the national government and downwards to its members, the organisations in the field of elderly care. In addition, the dual role is favourable because ActiZ is actively involved through lobbying, representing its members and making concrete implementation and actionable plans. Considering the duality of all co-authors of the GD3, the success of this role can most likely be generalised to all co-authors.

The cooperation between governmental organisations and elderly care organisations is therefore indirect, but linked by the same blueprint. Furthermore, the participation of a wide range of actors is important because climate change cannot be tackled by one or two people alone (Van den Hove, 1999). As noted by Nevitt (2023), the scale of this global challenge means that each government has a responsibility to take the lead in integrating change processes and supporting change initiatives. Nevitt (2023) also mentions international institutions as necessary to combat climate change, which makes it interesting to mention that the Dutch government can simultaneously use its Green Deal approach and stay connected to international frameworks. It makes sense that the Green Deal approach stems from the Paris Agreement and is therefore operational by working in smaller cells. Like all frameworks, the GD3 can be seen as a script, but without attributes, lighting or acting, it is just a piece of text. If the stage actors put on a great show, the audience is likely to take away what they have seen and tell others about their experience. In addition and in relation to this, the other frameworks such as the MTZ, the ESGs, the SDGs and the CSRD can be seen as complementing the GD3 and bringing it to life. The MTZ, in particular, is important as it provides concrete action points and insights into where an organisation currently stands and what it is doing that organisations can hold on to. It may be an advantage that the MTZ is being set up by one of the co-authors of the GD3, demonstrating that it is tailored to the needs and processes of healthcare organisations. An additional benefit of the concrete nature of the MTZ is that participants sometimes feel a bit competitive to be ahead of others and, above all, not to be the worst child in the class.

The answer to the first sub-question about how governmental and non-governmental actors work together therefore boils down to the fact that ActiZ acts as a mediator between the two. The governmental actors co-authoring the GD3 work directly with the other co-authors and indirectly with the other signatories. It is highly effective for smaller regional collaborations to emerge, as this reduces transaction costs and the chances of freeriding going unnoticed. In this way, Ostrom's (2009; 2010b) variable of a lower probability of success with a larger number of participants can be qualified by stating that smaller collaborations work very well within a larger framework. Particularly in the case of enormous global challenges such as climate change, it is important to find a way to cooperate successfully with a large number of participants, as Reena (2017) also states, and as will be discussed in more detail below.

6.2 | Collective action

In addition to cooperation between different actors operating at different levels, there is a need to discuss cooperation between organisations in the field of elderly care and the impact of this cooperation on the implementation of sustainability measures. This part will therefore focus on the four remaining sub-questions concerning the benefits of joining the GD3, the translation of objectives into concrete actions, the linkages between actors and

the challenges that may arise. Before answering these questions, it is important to note that while Ostrom (2009; 2010b) focused on individuals in her theory of collective action, here the theory is applied to an organisational level as it is highly applicable and relevant as the organisations involved in the GD3 behave like individuals.

6.2.1 | The big picture in small elements

A play is successful when the collaboration between different actors results in a significant net benefit for almost all of them, in terms of leaving the stage with a sense of success. Two sub-questions related to success are: what is the benefit for elderly care organisations to participate in the GD3, as a lack of success in previous agreements would lead to less participation in this version, and how are the goals set in the GD3 translated into concrete actions, as the actual actions are necessary to achieve the goals and thus a sense of success.

Let's start with the benefits of joining the GD3 for elderly care organisations. First, because each organisation signs the GD3 individually, each organisation feels a sense of responsibility and other organisations can hold others to account, even though the GD3 is a non-binding agreement. In particular, if sustainability is defined as a public good, which could lead to free-rider problems (Ostrom, 2009; 2010), this is offset by reputational damage, as doing nothing while signing the GD3 is damaging to the organisation. Unlike sustainability itself, the path to sustainable development can be seen as a common pool good, since, for example, grants are only available for a certain period of time and to a certain number of organisations. However, the participating organisations provide at least some input that increases the net benefit for all and can thus compensate for the lack of grants. One example is the cooperation 'Iedereen Zorgt' in the province of North Brabant, where the actors have collectively put money into a pot to work with. Another example is that actors make their willingness and knowledge available to others. Because of the many challenges specific to the elderly care sector, it is beneficial for organisations to join collaborative initiatives in order to address them more effectively. The collaboration 'Iedereen Zorgt' mentioned above started during the COVID-19 crisis and was found to be very useful, so the focus was shifted to climate change, among others, in order to continue the collaboration.

Secondly, organisations that are just starting to implement sustainability measures can get a boost from looking at and discussing with other organisations that have started long ago. Not only for organisations at the beginning of their sustainability journey, but for all, knowledge sharing is seen as an important factor of collaboration within GD3. This is in line with Batt and Purchase (2004) who state that knowledge can be shared more easily through networks, especially when internal and external actors are involved. For organisations participating in the GD3, the interplay in knowledge sharing between organisations that are just starting out and organisations that have been working on sustainability for a long time is a reciprocal relationship that is beneficial for successful

collaboration because they can learn from each other (Ostrom, 2009; 2010b). It should be noted that the GD3 has only just been signed, so the reciprocal relationship between organisations may still need to be developed. It may be of interest to explore the evolving relationship between different actors to see what it leads to in terms of implementation of agreements (Kamphorst & Donders, 2022). It should also be noted that while all representatives who participated in this research seem motivated not only to sign the GD3 but also to act on it, ⅓ of the aged care organisations that signed the GD3 on 8 December 2022 were unable or unwilling to participate in this research. It may be that these organisations lack the enthusiasm to do something about sustainability issues, but it does not necessarily mean that this is the case. Six months after the presentation of the GD3, another 14 elderly care organisations have already signed the GD3 (ActiZ, 2022b; Green Deal Duurzame Zorg, 2023), which means that there is a growing willingness within the elderly care sector to join this cooperative.

Thirdly, a final benefit of joining GD3 for elderly care organisations is that there is no need to reinvent the wheel. This is an advantage for organisations because they can implement sustainability measures relatively easily by copying, tweaking and pasting from another organisation to their own. There is also a general pressure to become sustainable. Related to this is the question of how the goals set out in GD3 are being translated into concrete actions. The answer is that this is happening in a number of ways. Firstly, the sector organisation ActiZ is developing implementation plans based on the GD3 targets. Second, the MTZ is being developed by MPZ as a concrete, actionable list of items to improve sustainability. Third, joining the GD3 gives immediate access to a huge network of different types of organisations where knowledge can be shared, others can be observed and actions can be copied and taken. These three practices enable organisations to take concrete actions from GD3, which is beneficial for elderly care organisations and increases the likelihood of a successful outcome. This also partly answers the question of Kamphorst and Donders (2022) about the implementation of actions as discussed in GD3, but should be reviewed in three years time when GD3 comes to an end.

6.2.2 | Done this more often

It is not the first Green Deal Sustainable Healthcare that this research focuses on, but rather the third. Even if this is the first Green Deal Sustainable Healthcare published by the Ministry of VWS, it is still not the first Green Deal published by the Dutch government. In addition, it is not the first time that the Dutch government participates in a climate agreement, which makes it even more important looking at successful ways of cooperation.

If an organisation commits to the first and/or second Green Deal but does not take action, this could lead to reputational damage, lower levels of trust from other organisations and therefore lower levels of cooperation (Ostrom 2009; 2010b). This is also the case for actors who join the GD3 but do not take action and participate in a possible fourth Green Deal. However, this should be explored and reflected upon once the outcome

of the GD3 is known. In addition, if an organisation has not participated in the first and second Green Deal, it will also take time for the actors to gain confidence as they will need to build trust with that actor, especially as there is a large group of organisations that have signed all the agreements so far. Due to the large group of actors involved in GD3, it is questionable to what extent the information on actors' past actions is available and accurate for all other actors. As a result, levels of trust may be unjustifiably higher or lower than they should be. This affects not only the level of trust, but also the level of reciprocity, as people are less likely to give a lot if they expect nothing in return. Ultimately, this leads to lower levels of cooperation and less success. So to say that the Green Deal approach is successful means that the net benefits should be substantial, which in a feedback loop relates back to good cooperation and higher levels of trust, reciprocity and reputation (see Figure 6).

In this context, the answer to the sub-question of how actors are linked to each other is that the links between actors vary considerably, with actors who have participated in the past possibly having a closer relationship than new actors. The large number of regional cooperation initiatives also has a strong influence on the cooperation between the actors involved. The links between actors in regional cooperation are stronger and more intensive, which increases the success rate of cooperation. A risk is that, with many smaller partnerships, there is a likelihood that not all organisations will be able to join such a partnership and that they may fall out. In addition, an organisation joining a regional cooperation currently relies on active individuals within an organisation who want to work together and seek out these partnerships. These active individuals are also the ones who take what they have learned back to the organisation, make changes and activate others. The danger is that when these individuals retire or change jobs, development grinds to a halt. It would be like the lead actor literally breaking his or her leg and the show being postponed to a later date, which is far from desirable given the magnitude of the climate problem and the health sector's share of it, as well as increasing staff shortages and an ageing population that will put more pressure on the elderly sector in general.

This brings me to the final sub-question of what challenges need to be overcome to achieve the goals set out in GD3. The first challenge relates to the active individuals mentioned above, which is in line with what Marwell and Oliver (1993) state, namely that these active individuals or organisations produce the net benefits rather than the average group. The second challenge for elderly care organisations is that becoming sustainable and active has to be done in an already challenging environment. Therefore, having sufficient financial and human resources to enable systemic change is a challenge. People's behaviour needs to change to embed sustainability in the organisation. The great advantage is that, once embedded in the organisation, employees and staff will take their work home with them and may also make the changes in their homes and inspire their households. However, freeing people from other tasks and freeing money for other investments for sustainability purposes requires another way of thinking, effort and

persuasive power that things need to be different. The third challenge, also seemingly contradictory, is that participants in this research see the GD3 as too non-binding, which may not lead to the goals set, whereas Ostrom (2009; 2010b) states that free entry and exit leads to greater willingness and voluntary participation by actors. While it could be argued that the level of trust and reciprocity must be higher due to voluntary participation, participants do not feel this way and see the GD3 as just for show. Two ways in which this could be addressed is that it might be beneficial to have some rules and regulations, such as clarity and consistency in e.g. waste separation, which is currently different inside and outside the organisation, will help to change behaviour and facilitate sustainability. Furthermore, it is important to keep in mind that the GD3 is not a blueprint in itself, but rather a script with additional tools and frameworks for increased actionability and implementation, such as the MTZ. In addition, if there is a real need to change (Nevitt, 2023), organisations can change and develop strategies very quickly as could be seen during the COVID-19 pandemic

This last challenge is interesting and shows the evolution of the Green Deal Sustainable Healthcare over the years, from the first version, which was a bottom-up initiative from the sector itself, to this third version, published by the Dutch government as part of the Green Deal approach. In relation to the collective action model defined by Ostrom (2009), the following argument can be made (Figure 6): the reputation of the actors involved in the first Green Deal can be considered high, as they were keen to start working on sustainability not only within their organisation, but across the sector. In order to start a Green Deal with each other, the level of trust needs to be high, as it is unlikely that people will start working together if they do not trust each other. In terms of reciprocity, this is an assumption about what one actor expects to get from another actor in return. After two versions of the Green Deal, it can be said that there is a degree of reciprocity because there are a significant number of actors who signed up to the first Green Deal and are still highly involved, which means that they need to get something in return for their participation, because if they got nothing, there would be no incentive to sign up again. Given these factors, the level of cooperation and eventual net benefits should be high. Should be, because net benefits are difficult to verify for two reasons. Firstly, the targets set in the GD3 are not as concrete as those described in the MTZ, which makes baseline and follow-up measurement more difficult. Secondly, the GD3 has just started, which means that the results will not be visible for three years. It is therefore of interest to monitor the collaboration in the GD3 and the end result, as one does not judge a show based on the rehearsals alone.

6.3 | Limitations & Suggestions for further research

There are a number of limitations to this research that need to be discussed. First, this research only lasted six months in the first semester of GD3, which means that it is not

possible to elaborate on the objectives achieved. Research over a longer period of time could lead to more embedded findings and inclusion of targets achieved if they are indeed there. Second, it would have been great if it would have been possible to attend face-to-face meetings and heydeys to observe the participants. The great advantage of participant observation is that it provides information about whether people act as they say they do. Third, it must be noted that in this research ⅔ of the aged care organisations that signed the GD3 on 8 December 2022 were included in this research, the other ⅓ did not respond or were unable to participate. It has not become clear why these organisations could not participate in this research Also, this research is limited to elderly care organisations that signed the GD3 on 8 December 2022 for reasons of scope, but it may be of interest to include organisations that signed the GD3 later, as there may be valuable reasons for doing so. Fourthly, it would have been interesting to include representatives from banks and health insurers or health authorities to hear their perspectives. These organisations are responsible for funding elderly care organisations and have a big say in the norms in the healthcare sector. Therefore, their point of view and vision on sustainability is of interest.

In relation to the limitations of this research, some suggestions for further research emerged. Including other organisations in the field of elderly care who have signed the GD3 after 8 December 2022, visiting face-to-face meetings with participants and including representatives from other organisations is feasible if the research is conducted over a longer period of time. Some people have responded too late to be included in this research, but are definitely willing to participate and can therefore be included if a researcher has more time. Another suggestion is to carry out research on one of the other health care sectors, such as hospital care, disability care and mental health care, as a comparative case study may be of interest to see what works for which type of organisation, as well as the fact that many health care organisations provide more than one type of care. A third suggestion would be to carry out research in three years' time to see what has happened since the agreement was signed and to consider whether the outcomes set out in GD3 have been achieved. The final suggestion is to carry out a comparative case study with another Green Deal, for example one that was set up entirely by the Dutch government rather than starting as a bottom-up initiative.

7 | Conclusion

By joining the GD3, organisations have a blueprint to do something, but it needs other tools and frameworks to be successful. Therefore, the main research question of how joining the GD3 helps elderly care organisations achieve their sustainability goals can be answered by saying that the GD3 is 'just' a piece of paper, but through the performance of its actors and empowered by tools, it can be an accelerating show for sustainability.

If the show is performed convincingly and successfully, it will be a show that many people will like, remember and ultimately apply to their own lives. Not only in elderly care organisations, but also in other care settings, staff, residents and their families take what they learn home with them. At the organisational level, two things can be concluded. First, collaboration between all types of health care organisations can inspire other sectors and industries to do the same. However, this will only happen if the GD3 is successful. Second, collaboration between organisations in the field of care for the elderly sheds light on some of the challenges specific to this sector, such as staff shortages and an ageing population, and having the knowledge, tools and networks to address them is very helpful. In addition, working together to tackle a major challenge such as climate change could be an inspiration to tackle other major challenges in the same way. However, after the COVID-19 pandemic, the argument could just as easily be made the other way round.

An actor can follow these scripts, but has artistic freedom in how they achieve the end result. An important part of a great show is the interaction and cooperation between the actors, as a show does not stand or fall on one actor alone, it is about the bigger picture. This also means that if one of the 150 actors does not implement any of the things listed in the GD3, the GD3 can still be a success story. However, this is likely to affect the level of reputation, trust and reciprocity, ultimately leading to lower levels of cooperation and lower net benefits. For one actor this impact may be small, but for multiple actors it is significant. Repeated experience with climate agreements, such as the GD3, also helps to build trust, reciprocity and reputation among participating actors.

The interesting part of the GD3 is that it involves bottom-up and governmental actors, resulting in a dynamic and shared form of governance. This leads to increased participation and implementation of what is discussed and decided. Its success depends on active participation, implementation of sustainable actions and maintaining trust and cooperation among the diverse group of actors involved. The GD3 serves as a valuable initiative within the health sector, providing a script for sustainability efforts while allowing organisations to adapt and take artistic license in achieving the desired outcomes. Ultimately, the aim is to be able to present a dazzling sustainability show in three years' time, demonstrating that the system has changed. The show must go on, because the clock is ticking on sustainability. But more than that, the show must go on because the healthcare system in the Netherlands, especially as regards care for the elderly, must change to be sustainable in the future, but also in view of an ageing population.

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Appendices

Appendix 1: Interview/Topic list

- Personal
    - Why did you start working for the organisation you are actively engaged with?
    - What interests you about sustainability?

- Organisation
    - Which organisation are you representing?
    - Why did the organisation join the GD3?
    - Which other organisations are you closely collaborating with?
    - What do you consider your role within the GD3?

- Goals
    - How are goals defined in the GD3 and in your organisation?
    - How do you define concrete actions based on the goals defined?
    - How are you measuring your progress?

- Network/Collaboration
    - What do you think of a collaborative approach?
    - How would you ideally vision a collaboration?
    - How do you collaborate with others after the agreement has been signed?
    - What do you consider most important in collaboration? // With which organisations do you collaborate most intensively?
    - Did you have a say in shaping the GD3? Did you write on the GD3?
    - How does collaboration go with this many actors involved in the GD3?

- Daily practices
    - On a daily basis, how are you working on the GD3?
    - How are the daily work processes concerned with sustainability?
    - What are concrete actions taken to become more sustainable?
    - Where do you see the best improvement?

- Learnings
    - What have you learned so far?
    - Biggest challenge you've overcome?
    - What would be a piece of advice to other organisations?

Appendix 2: Informed Consent Form

Informed Consent Form - Participation

You are invited to participate in a research study entitled Collective Action in the Green Deal 3.0 Sustainable Healthcare. This study will be conducted by Iris van der Kamp, a Masters student in Industrial Ecology at TU Delft and Leiden University.

This research study aims to gain insights into a collective action approach, such as the Green Deal 3.0 Sustainable Healthcare, to achieve climate action and will take approximately 60 minutes to complete. The data will be used for research purposes. The data collected will be integrated into a Master's thesis for TU Delft and Leiden University. I will ask you to conduct an interview with me to gain insights into the way of working, cooperation and approaches to achieve sustainability in the healthcare sector and more specifically in elderly care organisations. Questions will be asked about which actors you collaborate with, how this collaboration works and how you see your role in achieving climate action.

As with any (online) activity, there is always a risk of breach. To the best of my ability, your answers in this study will remain confidential. I will minimise any risks by anonymising your personal data and your answers to my questions. I will be the only person who uses and analyses your data. You will always be able to see your answers and gain insight into the data provided.

Your participation in this study is completely voluntary and you can withdraw at any time. You are free to skip any questions.

For questions or remarks, please do not hesitate to contact me:
Name Researcher: Iris van der Kamp
Email address: iris.vanderkamp@momomedical.com
Phone number: +31-6-51283376

Please fill in the form below and send it to iris.vanderkamp@momomedical.com after being signed.

PLEASE TICK THE APPROPRIATE BOXES	Yes	No
A: GENERAL AGREEMENT – RESEARCH GOALS, PARTICIPANT TASKS AND VOLUNTARY PARTICIPATION		
1. I have read and understood the study information dated [*27/03/2023*], or it has been read to me. I have been able to ask questions about the study and my questions have been answered satisfactorily.	☐	☐
2. I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason.	☐	☐
3. I understand that taking part in the study involves: - An audio/video-recorded interview - Which is recorded through a smartphone or other electronic device - And transcribed as text afterwards - In which personal data is anonymised	☐	☐
4. I understand that the study will end halfway through August 2023	☐	☐
B: POTENTIAL RISKS OF PARTICIPATING (INCLUDING DATA PROTECTION)		
5. I understand that taking part in the study involves the following risks: - Sharing information through Teams, Zoom, or Google Meet - The information will only be shared with the researcher and handled with care.	☐	☐

6. I understand that taking part in the study also involves collecting specific personally identifiable information (PII) [...] and associated personally identifiable research data (PIRD) [...] with the potential risk of my identity being revealed [...] - The PII includes name, age, gender, email address, and work/organisational activities. This PII is anonymised and only known to the researcher.	☐	☐
7. I understand that the following steps will be taken to minimise the threat of a data breach, and protect my identity in the event of such a breach: anonymisation of personal data, secured data storage and limited to no access of others to the data, and removal of video/audio materials after transcripts have been made so voice and face recognition are not possible.	☐	☐
8. I understand that personal information collected about me that can identify me, such as name, age, and organisation I work for, will not be shared.	☐	☐
9. I understand that the (identifiable) personal data I provide will be destroyed after this research project has been completed, which approximately will be after August 2023.	☐	☐
C: RESEARCH PUBLICATION, DISSEMINATION AND APPLICATION		
10. I understand that after the research study, the de-identified information I provide will be used for a master's thesis publication on TU Delft and Leiden University repository.	☐	☐
11. I agree that my responses, views or other input can be quoted anonymously in research outputs	☐	☐
D: (LONG-TERM) DATA STORAGE, ACCESS AND REUSE		

12. I give permission for the de-identified anonymised data during the interview **that I provide to be archived in TU Delft and Leiden University repository so it can be used for future research and learning.**	☐	☐
13. I understand that access to this repository is open to anyone.	☐	☐

Signatures

_____   _____ _____

Name of the participant   Signature   Date

I, as a researcher, have accurately read out the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

_____   _____ _____

Researcher name   Signature   Date

Study contact details for further information:

Iris van der Kamp

iris.vanderkamp@momomedical.com

06-51284476

Appendix 3: Summaries of all the interviews

Summaries of all the interviews conducted, including a summary of one participant's answers to some questions by e-mail. All names are the pseudonyms of the participants, who are also listed in Table 2.

Interviewee 1 - Groene Zorg Alliantie

Interviewee 1 is a doctor who works for the GZA and explains that the GZA is a bottom-up initiative that started in 2021. It is an umbrella organisation that coordinates various green healthcare projects. The GZA has almost 130 parties and represents almost 140,000 healthcare professionals who want to become greener. The GZA is also a co-author of the Green Deal 3.0 and influences the political debate.

Interviewee 1 goes on to explain that the GZA is a small team of 9 people, but that they have a large constituency of healthcare professionals involved in green initiatives. (S)he describes how the GZA got involved in the Green Deal and how they pushed for more attention to be paid to the relationship between climate change and health.

This interview discusses various aspects of the Green Deal and the role of the Ministry of Health, Welfare and Sport (VWS). Interviewee 1 emphasises the importance of genuine commitment to the Green Deal and avoiding greenwashing. She points out that although the VWS plays a role in setting regulations and giving mandates to, for example, health insurance companies, it is ultimately the hospitals and health administrations themselves that are responsible for implementing sustainability plans.

Cooperation between organisations within the Green Deal was also discussed. Interviewee 1 notes that cooperation is taking place and that there are regular working group discussions. (S)he stresses that many healthcare professionals are motivated to go green and become more sustainable because they see that healthcare itself contributes to making people sick. However, challenges are also mentioned, such as different interests and limited resources on the part of the Ministry of VWS.

Interviewee 1 says that plans have been drawn up for a four-year period and will be presented to the House of Representatives in March. The achievement of targets in previous versions of the Green Deal is also mentioned, as is the fact that the Environmental Platform Care (MPZ) is involved as a knowledge institute. Interviewee 1 notes that in principle anyone can sign up for the Green Deal, but that there are different levels of involvement and commitment among the parties involved. For example, it is mentioned that even organisations that are not primarily focused on sustainability, such as the Bergman Clinic, have signed and are committed to reducing material waste. (S)he has some doubts about the success and honesty of these types of organisations.

Interviewee 2 - Pennemes

Interviewee 2 works at Zorggroep Zaanstreek in Pennemes and is active in the field of sustainability. Interviewee 2 explains that their organisation is known as a testing ground for nature and health in elderly care. They have done a lot of research and are ambassadors for the Green Deal Sustainable Care. They signed up to the Green Deal in 2016 and have tried to influence the text, particularly to draw attention to green healthy living.

Interviewee 2 explains that they work with a model with five components: healthy air, plants, sunlight, animals and experience. They have taken steps to improve air quality, use plants to clean the air and have a positive effect on the psyche, use sunlight with lamps and integrate animals and biodiversity. Experience and play elements are also important to invite people to play and enjoy the environment.

Getting everyone in the organisation involved can be difficult because many healthcare organisations are based on a hospital model of care and try to avoid risk. There can be resistance to accepting risk and allowing animals in healthcare facilities. Interviewee 2 emphasises that management support and awareness of potential risks are essential. They have conducted interviews and shown that the benefits of a green living environment outweigh the occasional risks. Residents experience improved quality of life, care and health benefits.

Interviewee 2 points out that sustainability procurement criteria are often imposed without much bargaining power. Although the industry association can have some influence, (s)he notes that the Green Deal is not yet specific and concrete enough to make a real difference. The Green Deal is seen as a well-intentioned initiative with no binding obligations on participants. (S)he is dissatisfied with the lack of clear targets and concrete measures within the Green Deal. Interviewee 2 stresses the importance of formulating and communicating specific targets so that the message is not lost.

While Interviewee 2 acknowledges that there are organisations that are actively acting and pursuing change, (s)he notes that staff shortages and other pressing issues in elderly care make the greening process difficult. (S)he believes that organisations need to choose which issues to prioritise and that staff shortages currently require the most attention. Nevertheless, Interviewee 2 shows that Pennemes is actively involved in sustainability projects by using solar panels, solar hot water, electric cars, eliminating single-use plastics and is involved in a pilot scheme to recycle incontinence materials. Interviewee 2 stresses that sustainability efforts can go hand in hand with changes in working practices and living environments, such as offering tiny houses to employees as a recruitment tool.

Interviewee 3 - Zorggroep Elde Maasduinen

In this interview, Interviewee 3 talks about the sustainability programme of Zorggroep Elde Maasduinen, a healthcare organisation in North Brabant. They have developed a strategic sustainability programme and are working with a partner called Intrakoop, which offers expertise and a network in sustainability in the real estate sector. They have signed the GD3, which has resulted in a partnership with 12 other regional healthcare organisations.

Various sustainability initiatives are discussed. One of these is complying with the EED and the Approved Measures List (EML), which shows what measures can be taken to pay for themselves within five years. They are using ActiZ's MPZ tool to measure CO2 reduction and are working on developing scenarios to meet the 55% CO2 reduction target by 2030.

Interviewee 3 also discusses a grant that will enable them to create sustainable social real estate. They also have to deal with the information obligation of the RvO, which requires them to report on energy savings. There is a small discussion between ActiZ and the RVO about which reporting tool to use. The CSRD is also mentioned, which will require listed organisations to report on their sustainability efforts from 2024.

Interviewee 3 notes that meeting sustainability targets can be challenging, both financially and practically. Additional funding is needed and there are uncertainties regarding policy and legislation. Despite these challenges, the healthcare group is committed to being at the forefront and meeting ever-changing sustainability requirements.

Interviewee 3 explains that they work with 12 other elderly care facilities to share knowledge and learn from each other. (S)he compares this to the corporate world, where organisations now rely more on market parties to carry out certain tasks. Interviewee 3 stresses that care should also focus more on care tasks and leave the management of premises and real estate to others.

Interviewee 3 believes that change is needed and that healthcare leaders understand this. (S)he stresses that collaboration and knowledge sharing are increasingly important, especially with younger generations sharing and collaborating more easily.

Interviewee 3 points out that residents are unlikely to notice much of the change, but that families and carers will be involved and understand why certain things are being done. (S)he concludes by highlighting the complexity of the challenges facing the elderly care sector, but remains optimistic about working together and striving for sustainability and improvements in care.

Interviewee 4 and Interviewee 5 - IJsselheem

Interviewee 4 and Interviewee 5 work at IJsselheem and are part of a so-called Green Team in the organisation. IJsselheem's Green Team consists of 12 members and was established last autumn. The team is responsible for making IJsselheem's 16 sites more sustainable and aims to create sustainability ambassadors at each site. The creation of the Green Team was linked to ActiZ's commitment to developing a sustainability roadmap. The team has committed to signing the GD3 and is now working on implementing the sustainability policy.

Making IJsselheem's real estate more sustainable is a key focus for the Green Team, but this poses challenges due to the old buildings and the sharing of buildings with other parties. The team has made an inventory of the least energy-efficient buildings to start with. Funding proved to be a stumbling block as there are few grants available and those that are available are often exhausted. Nevertheless, they have started to green the fleet.

In addition to making the property more sustainable, the Green Team notes that there are fewer initiatives in elderly care than in hospital care, for example. However, they are positive about the willingness of other organisations, such as the hospital in Zwolle, to cooperate and help. The team stresses that there is still little awareness of sustainability in elderly care, but there are opportunities to become more sustainable, such as reducing the waste of incontinence materials.

Internally, there is a positive attitude towards sustainability at IJsselheem, although not everyone is fully informed. The Green Team is supported by the organisation, with care team members being released from their regular duties to work on the sustainability project. The team devotes considerable hours to the project, with Interviewee 5's commitment being the highest (40 hours per week) and others ranging from 4 to 12 hours per week.

Over the past three months, the Green Team has mainly worked on developing policies and replacing the car fleet. Concrete actions include the installation of solar panels on the roofs, the reduction of pharmaceutical waste, and joining the GZA and the MPZ. Despite the challenges and limited resources, many small steps have been taken to promote sustainability at IJsselheem.

Interviewee 6 - Iedereen Zorgt

Interviewee 6 is a sustainability consultant. (S)he combines the passion for sustainability with experience as a change manager and currently works in various sectors, including software, healthcare and the factory industry. (S)he is involved in the North-East Brabant region, where 12 healthcare institutions have developed a regional vision, including sustainability as a new theme. Interviewee 6 was brought in to help implement the Green Deal after it was signed by the organisations.

The focus for sustainability is mainly on CO_2 reduction and the reduction of resource consumption and waste. Within elderly care, incontinence materials are the largest waste stream, generating more than 50,000 tonnes per year. Interviewee 6 notes that implementing change takes time and requires buy-in from different departments and levels of management.

In addition to waste, Interviewee 6 also highlights the impact of food waste and the choice between animal and vegetable proteins in elderly care. Interviewee 6 acknowledges that each organisation has its own approach and preferences, but stresses that awareness and changes in food choices can have a big impact. Interestingly, according to the 2018 report, food is not included in the healthcare sector's CO_2 emissions (7%). Interviewee 6 finds this strange and stresses that food is an important factor that the healthcare sector can influence. (S)he calls for more awareness and action in this area.

Overall, Interviewee 6 uses the experience as a change manager to support sustainability initiatives in various sectors. The current focus is on CO_2 reduction, resource consumption, waste and food waste, where (s)he concentrates on raising awareness and implementing changes to have a positive impact on sustainability.

The organisations working together in the province of North Brabant each have their own focus on care, nursing or home care, but see benefits in working together because they can share knowledge and reduce the cost of failure. There is cooperation with other parties, such as the Ministry of VWS and the sector organisation ActiZ, which provides guidelines and programmes to achieve the goals of the Green Deal. The targets, such as a 55% reduction in CO_2, are challenging but achievable through insulation, technological innovation such as heat pumps and solar panels, behavioural change and reducing food waste. Healthcare institutions can develop policies to select sustainable products and look critically at the use of medicines. The diversity of approaches within institutions and the involvement of staff and residents are highlighted as important aspects of the Green Deal in elderly care.

Interviewee 7 - Leger des Heils

Interviewee 7 is Programme Manager for Sustainability at the Leger Des Heils (Salvation Army). (S)he has worked for the organisation for ten years. Interviewee's 7 role includes overseeing sustainability initiatives and other internal organisational tasks.

The Leger Des Heils is a large international organisation with more than 7,000 employees in the Netherlands alone. The organisation focuses on helping people in need and has contributed to the definition of the Sustainable Development Goals (SDGs). They work closely with the UN and aim to tackle social injustice and various issues around the world.

Regarding sustainability, the Leger Des Heils launched its official initiatives in 2018. Interviewee 7 mentions that the organisation has seen a growing focus on sustainability, especially in the areas of facilities management and real estate, driven by new regulations and the need to reduce CO_2 emissions. The organisation owns around 100 properties and leases 150 to 200 sites. Interviewee 7 believes that there is significant potential to reduce environmental impact by reducing energy consumption, addressing travel emissions and improving waste management.

The MTZ certification programme is implemented at the Leger Des Heils. The organisation aims to certify 54 sites this year as part of its commitment to environmental compliance. The MTZ programme also serves as a platform to involve participants in shaping sustainability practices, such as the introduction of Meatless Mondays.

Another major project is the portfolio approach, which involves working with a national environmental agency to meet information reporting requirements. Instead of dealing with several regional agencies, Leger Des Heils reports to a single inspector and sets energy-saving targets for its entire portfolio. The aim is to meet the CO_2 reduction targets for 2026 and 2030 and to ensure compliance with reporting requirements.

Interviewee 7 emphasises that sustainability is not only about technical solutions such as solar panels and energy-efficient systems but also about changing behaviour and making conscious choices. The organisation aims to engage participants and residents in sustainable practices, recognising the importance of their involvement in shaping a greener and more sustainable future.

Interviewee 8 - Cicero Zorggroep

Interviewee 8 is a policy officer at Cicero Care Group and explains that they signed up for the GD3 to provide sustainable care, partly because of pressure from funders and the future obligation to procure sustainable care. They have also had five of their sites successfully certified for the MTZ.

The MTZ has three levels of certification (bronze, silver and gold) and focuses on issues such as water, energy, property, catering, waste management and cleaning. Certification is carried out by an auditor who checks that the requirements have been met. This certification helps Cicero Care Group demonstrate its commitment to sustainability to companies and partners.

Interviewee 8 notes that the MTZ does not translate directly into the Green Deal, but there is a lot of overlap. However, the certificate provides sufficient evidence that the organisation is working towards the Green Deal's goals. It is discussed that the MTZ comes from the Milieu Platform Zorg (MPZ) and that ActiZ, a trade association for healthcare organisations, is also involved in the translation of the Green Deal.

The Cicero Care Group communicates sustainability efforts internally and on social media. They are working on waste separation, sustainable construction, sustainable food and reducing food waste. They have also invested in solar panels, electric car charging points and an energy audit of all sites.

Interviewee 8 stresses that signing up for the Green Deal is still an effort at the moment and would be difficult to monitor. (S)he believes that organisations that sign up for the GD3 will actually take action. However, (s)he sees potential for further development in the future.

Collaboration with other elderly care organisations is being discussed through a national consultation called 'Co-Working Space'. Interviewee 8 notes that they have also set up regional meetings to reduce travel time, travel costs and CO2 emissions. It is mentioned that there is still discussion about the CSRD and how to implement it. Overall, there are national and regional partnerships to share experiences and promote sustainability in elderly care.

The challenges and barriers to making properties more sustainable, especially in older locations, are also discussed. Energy consumption is also an important issue, particularly because of rising costs. Motivating staff to adopt sustainability practices is identified as a challenge. The administrative burden of new obligations is also mentioned, such as tracking staff commuting, including fuel consumption, which is seen as a large administrative burden with no direct impact on sustainability.

Interviewee 9 - Pieter van Foreest

Interviewee 9 works as a sustainability consultant at Pieter van Foreest and is in this role since July 2019, mainly working on CO_2 reduction and employee vitality. They signed the Green Deal 2.0 and last year also the new 3.0.

Interviewee 9 says they work with the MTZ at Pieter van Foreest and explains that they have a checklist of mandatory requirements and 14 additional requirements to choose from to get the bronze certification. She shows what the MTZ looks like. They complete the checklist and show how they meet the requirements. An audit is carried out to check that they actually meet the requirements. Employees at the sites are involved in the process and are required to make behavioural changes, such as separating waste.

Interviewee 9 has sole responsibility for sustainability, but there are consultants for other aspects such as safety, hospitality and cleaning. They work together to certify the sites. They chose the MTZ because it covers all facets of the Green Deal. The MTZ has different topics and requirements such as sustainability policy, CO_2 reduction plan, energy management, waste management, food and mobility. Interviewee 9 explains that their current focus is on energy saving, CO_2 reduction and mobility as these are the aspects that have the greatest impact on the sites. Mobility relates to commuting and they are trying to encourage employees to use more sustainable means of transport.

The importance of energy saving is discussed and the measures that Pieter van Foreest is taking, such as installing solar panels, LED lighting and sustainable heating options. Residents generally do not notice much of these changes, but the rise in energy prices has helped to raise awareness.

Interviewee 10 - Milieuplatform Zorg | Stimular

Interviewee 10 is the director of MPZ and Stimular and has 30 years of experience in sustainable business. The first Green Deal was set up by MPZ because they realised that environmental coordinators in healthcare organisations were often the only people dealing with environmental issues. MPZ developed the MTZ, which is used by around 150 healthcare organisations and has contributed to steps towards circular and carbon-neutral practices. The tool provides concrete and tangible guidelines, which is important in a healthcare system where rules dominate and initiative is discouraged.

MPZ works mainly with internal departments such as facilities and estates in healthcare organisations. They also have contacts with industry organisations and the Ministry of VWS, but do not always influence decision-making. However, MPZ has started discussions with the government to remove the bottlenecks between legislation and care. The Green Deal was an alternative to promote sustainability when subsidies were no longer available. MPZ was involved in the first Green Deal and is still involved in the third version. Interviewee 10 says that the Green Deal in the Netherlands is part of a global movement in which the healthcare sector is embracing sustainability.

According to Interviewee 10, healthcare can become more sustainable in the areas of energy, real estate, food, mobility, sustainable procurement and the use of medicines. The use of medicines, in particular, is a complex issue for which there is currently no policy. Interviewee 10 stresses that a different economy and approach is needed to make the current generation healthy without harming future generations. The MPZ is trying to get this message across by raising awareness and showing that action is needed to bring about sustainable change. Medical education, in particular, is still lagging behind in this area.

MPZ is considered a pioneer in spreading the message of sustainability in the healthcare sector, having worked on the issue for 25 years. It is important that insurers and administrators recognise sustainability as a social issue and implement it in healthcare. In addition, healthcare can inspire other industries and show how sustainability can be addressed.

It is noted that the government has an important role to play in facilitating and driving sustainability in the healthcare sector. However, a Green Deal alone is not enough; there needs to be an implementation programme and support from the ministry. Government support is needed to integrate sustainability into the health system.

Collaboration with the GZA and other organisations is mentioned as a way to further promote sustainability, and it is noted that changes in education are needed to integrate sustainability more widely.

Interviewee 11 - Erasmus MC | KNMP

In this interview, Interviewee 11, an intensive care nurse at Erasmus MC, vice president of KNMP and researcher, is asked about sustainability initiatives in healthcare.

Interviewee 11 explains that (s)he works with TU Delft and Erasmus University to promote technology in medicine. (S)he is also involved in setting up the research arm on sustainable care at Erasmus MC and works closely with Green Teams to implement sustainability initiatives. The aim, (s)he says, is to let the workplace come up with ideas and use their intrinsic motivation. There are currently over 30 Green Teams.

How are the Green Teams formed and what questions are asked? Interviewee 11 explains that the Green Teams came about spontaneously and that they receive questions on a variety of topics, such as turning off computers at night, reducing plastic waste, using sustainable food and installing solar panels. Erasmus MC has already done a lot to promote sustainability, such as analysing material flows and calculating CO_2 emissions. They work with universities to find targeted solutions as they have more knowledge in specific areas such as plastics.

Interviewee 11 sees the Green Deal as a useful tool to accelerate sustainable behaviour and as a common framework for the health sector. (S)he believes that the targets are achievable, but stresses the need to take into account the differences between healthcare organisations and the challenges they face. Collaboration between institutions and sharing of knowledge and experience is important to achieve sustainability goals. There are also other initiatives, such as the SDGs and the MTZ, which are all complementary.

Interviewee 11 explains that they have prepared a document with 115 Green Deal items, which are linked to the SDGs and ESGs. This document acts as a guide and makes it visible to employees what they are working on and the impact they can have. It is used as a communication tool to raise awareness and motivate people to promote sustainability.

Overall, this interview highlights the importance of collaboration, intrinsic motivation and knowledge sharing to drive sustainability initiatives in healthcare.

Interviewee 12 and Interviewee 13 - AxionContinu

This interview discusses the role of sustainability within the AxionContinu organisation. Interviewee 12 states that (s)he has been with AxionContinu for a long time and has held various positions in facilities management. (S)he was attracted to sustainability and, together with a colleague, took up the position of Sustainability Manager in 2020. Interviewee 13 has now been hired to focus entirely on sustainability.

Regarding the focus on sustainability within AxionContinu and how this is communicated to employees, Interviewee 12 explains that they are in the process of setting up AxionContinu's intranet where messages can be posted and information can be shared. They are also working on a communications plan to make sustainability more visible within the organisation.

Interviewee 12 emphasises that the healthcare sector has a responsibility to reduce CO2 emissions and that the Green Deal is a good guide to setting common targets. (S)he explains that the third version of the Green Deal sets clearer requirements, such as the percentage of circular procurement. There is also more emphasis on what individual employees can do. (S)he points out that AxionContinu has already done a lot on the technical side, such as installing insulation and solar panels, but now the focus is on what employees can do to contribute to sustainability.

Also, the importance of individual catalysts to get sustainability initiatives off the ground is discussed. It is pointed out that there should be room for people to take initiative across teams; innovation clubs within the organisation can play a role in promoting sustainability.

At AxionContinu they are working on the MPZ and Stimular Foundation's environmental barometer, which they use to measure their consumption, waste production and CO2 emissions, and to benchmark with other organisations. It is noted that there are many laws and regulations that they have to comply with, and they are advocating for more uniformity in these rules.

AxionContinu is in contact with other organisations, such as the MPZ and a knowledge community of the province of Utrecht, where they share experiences and knowledge about sustainability and regulations. They are also in contact with other elderly care organisations through ActiZ, the sector organisation.

When it comes to making care for the elderly more sustainable, mobility, buildings and food are key areas of focus. They want to pay attention to mobility and reduce food waste. Waste separation is also important and although they already separate waste, there are still areas for improvement, such as separating plastic and incontinence materials.

Interviewee 14 and Interviewee 15 - Ministry of Health, Welfare and Sports
This interview discusses how the GD3 came about and what it involves. Interviewee 15 takes over the GDDZ (Green Deal Sustainable Care) portfolio from Interviewee 14 at the Ministry of Health, Welfare and Sports.

Interviewee 14 explains that the initiative for Green Deal 3.0 was taken by several care organisations, but that the Ministry also plays a role in publishing and coordinating the deal. The process of developing the Green Deal involved working groups and separate meetings where stakeholders discussed and exchanged ideas. There were discussions and differing opinions on the content of the Deal, as the organisations involved have different backgrounds and interests. Efforts were made to strike a balance between ambition and feasibility for the different parties.

The interview continues with a discussion of specific issues, such as protein transition and waste separation, and how these are viewed differently by different organisations. Examples are given of how certain targets may be achievable for some organisations, such as university medical centres, but perhaps more challenging for others, such as mental health or elderly care organisations.

Interviewee 15 and Interviewee 14 emphasise the importance of monitoring progress and evaluating targets. They acknowledge that it is difficult to get a good picture of the current situation and that there is a need for better monitoring and data. Financial resources are not readily available to organisations signing up for the Green Deal, but efforts are being made to develop tools and resources and to encourage knowledge sharing between healthcare organisations. Interviewees emphasise that collaboration and sharing of experience is essential to speed up and improve the process.

Interviewee 16 - Sevagram

Interviewee 16 works for an elderly care organisation in Limburg called Sevagram and shares interest in working with care organisations. (S)he explains that many organisations tend to develop unique solutions without looking at others. Interviewee 16 highlights the lack of professionalism and organisation in the field. (S)he also notes that existing platforms for collaboration are often non-binding and that there is a need for more binding collaboration and coordinated action. Interviewee 16 also discusses his involvement in setting up a facilities company at Sevagram, an elderly care organisation, and how sustainability gradually became more important there. (S)he mentions the lack of policy and the need for more coordinated efforts on sustainability, both in terms of buildings and staff.

Interviewee 16 stresses the importance of respecting the care sector and acknowledges that facilities management and other aspects of sustainability also require a professional approach. (S)he explains that the lack of cost control and consistency in care often leads to higher costs. It is important to work together and manage expectations, both within the organisation and between employees. It is discussed that engaging all employees is a challenge, but that sustainability is becoming an easier topic, especially with simple measures.

To ensure that everyone is involved in sustainability, Sevagram has engaged in marketing communications and they want to be transparent through the website and internal Q&As. They are trying to engage people and collect ideas, prioritising those that can be implemented in the short term. There is talk of a 'ball pit' where ideas can be collected and prioritised.

In terms of future sustainability plans, there is talk of continuing initiatives such as installing solar panels and replacing coffee machines and photocopiers with more energy-efficient versions. There is also a focus on employee health and vitality, with support and encouragement programmes in place. The outdoor environment is also used, with a focus on green spaces and encouraging staff and customers to get outdoors.

Interviewee 17 - ActiZ | Van Neynsel

Interviewee 17 is a doctor and director at Van Neynsel, on the topic of sustainability. (S)he emphasises that sustainability is an important aspect of elderly care, given the ageing population, staff shortages and the many problems associated with it. (S)he is also actively involved in ActiZ, the trade association for elderly care organisations.

Interviewee 17 explains that sustainability needs to be tackled at different levels, from talking to the minister in The Hague to purchasing at the site level. (S)he believes it is important to be involved at both policy and executive levels and to make the connection between different layers and change processes.

The Green Deal came about through cooperation between the government and industry organisations. Interviewee 17 explains that the Green Deal is general and then specified in implementation plans per industry. These plans serve as guidelines and encourage healthcare organisations to pursue sustainability and meet certain requirements. Interviewee 17 stresses that it is important for the industry to have a collective ambition and commitment, as this is necessary for the various trajectories and financial aspects. Although there is some support from the government, it is financially challenging for healthcare organisations to implement sustainability measures.

Interviewee 17 acknowledges that sustainability costs money and that it is a challenge to motivate employees and organisations to consider sustainability as a fundamental aspect of life. (S)he stresses that it is not only a functional aspect but also a matter of personal conviction. It is a complex discussion in which campaigns can help, but in which principled choices and compromises also have to be made. Interviewee 17 notes that the sector and Van Neynsel are not yet fully ready for these changes and that there are still many obstacles to overcome.

Interviewee 17 explains that engaging staff and meeting residents' expectations is a challenge. (S)he believes that the change has to start with the organisation itself, for example by adapting services and showing commitment to sustainability. It is important that employees are convinced and can translate the change into individual relationships. Interviewee 17 acknowledges that this process takes time.

Asked about the feasibility of the Green Deal's goals, Interviewee 17 advocates a plan B if goals cannot be achieved within the timeframes set. (S)he stresses the importance of standards and obligations, as imposed by auditors, health insurers and the government, to accelerate change. Interviewee 17 also suggests that competition can lead to more commitment and action. Although implementing sustainability measures can be challenging, it is an inevitable development.

Interviewee 18 - Pantein

Interviewee 18 is an environment and safety consultant at Pantein. (S)he spends about one day a week on sustainability issues, but Green Teams have also been set up to represent different departments and focus on sustainability initiatives. Interviewee 18 points out that there are no concrete plans for sustainability within Pantein yet, but that they are working with the Green Deal pillars. They are focusing on vitality, gas and electricity consumption, mobility, waste separation, procurement and property, among others. Interviewee 18 emphasises that signing up to the Green Deal means that they have to take action, and that there is a reputational risk if they deviate. (S)he calls for more communication about sustainable initiatives, both internally and externally. Interviewee 18 notes that using green energy already reduces CO_2 emissions significantly.

They are trying to motivate employees to adopt energy efficient behaviour and also considering plans to renovate and build new properties. Interviewee 18 emphasises that the Green Deal is not a legal obligation, but that signing up to it shows their commitment to sustainability. (S)he advocates humility and communicating the steps taken.

On the one hand, there are industry organisations working on meaningful issues that have financial implications. On the other hand, Pantein tries to ensure that the whole organisation is involved in sustainability and tries to involve people from different departments in the Green Teams.

Discussing the Green Deal highlights the importance of involving the whole organisation and the fact that it is not just the responsibility of the director who signs the deal. A steering committee has been set up and various Green Teams and project groups work together to evaluate issues, develop ideas and assess investment requests. Interviewee 18 also stresses the importance of motivating the organisation and encouraging people to get involved in sustainability initiatives. However, due to time constraints and other commitments, not everyone is keen to get involved.

It is also discussed how sustainability is defined and what choices are made in relation to sustainability initiatives. Questions are raised about what is really sustainable and how to measure certain aspects. It is emphasised that the organisation carefully weighs the costs and benefits of sustainability projects and looks for initiatives that are both financially and practically feasible. The discussion around the definition of sustainability and the decisions that need to be made about investments is also highlighted.

Interviewee 18 points out that the Green Deal can create positive pressure for action, but that there are also challenges, particularly in the vagueness of certain targets. It is emphasised that measurability and realistic targets are important for success.

Interviewee 19 - Iedereen Zorgt

The interview is about a network organisation of 13 VVT (care, nursing and home care) institutions in North-East Brabant that have started to work together more intensively as a result of the Corona pandemic. The organisation has created a common pot of grants and budgets, from which they try to do smart things together. Most of the funding comes from the Department of Health, which also recognises that big changes are needed. The collaboration has been driven by the need to address problems in care that cut across individual organisations.

The programme director plays an important role in coordinating the vision and translating it into practice, working closely with the organisations involved. Several pots of money have been made available, including national grants from the Ministry of Health, Welfare and Sport, and five programme lines have been drawn up, including sustainability.

The organisations have collectively signed up to the Green Deal and there are no major differences between the organisations in terms of its application. An external consultant has been hired to carry out a baseline measurement for each organisation and to draw up a roadmap for the coming years. Cooperation varies according to the topic but mainly consists of joint decision-making and the initiation of activities and projects.

An important aspect of the collaboration is to address sustainability issues. Eight innovations have been identified for the organisations to implement in the coming years. The pace and focus of the innovations will vary according to the nature and size of the organisations. The aim is to provide a consistent offer and service to the region's residents, regardless of which organisation they contact.

Collaboration and the pursuit of efficient use of capacity also aim to encourage people to be more independent and to take responsibility for their own care where possible.

Interviewee 20 - Rivas Zorggroep

Interviewee 20 is Sustainable Care Programme Manager at Rivas Zorggroep. (S)he explains that sustainability and future-proofing are key challenges for care organisations in the face of an ageing population and staff shortages.

Interviewee 20 explains that sustainability and future-proofing can be combined, for example through digitalisation and the adaptation of real estate in elderly care. Property is an important focus for sustainability, but also a challenge because of the high costs involved.

The financial aspect is mentioned as the biggest challenge for sustainability in healthcare, as healthcare organisations have limited financial resources. Interviewee 20 explains that healthcare organisations need to invest in sustainability themselves and that additional investment is needed to accelerate, but that this is financially difficult. (S)he questions whether the 2026 and 2030 targets are achievable due to the complexity and cost of sustainability measures.

Rivas' sustainability focus areas include real estate, waste management, greening of operating theatres and green procurement. Interviewee 20 stresses that the workforce is enthusiastic and willing to contribute to sustainability. (S)he acknowledges that there are challenges, but so far there have been no projects where sustainability measures have had a negative impact on the work process.

Other issues discussed include the importance of signing up for the Green Deal, decision-making within the organisation, legislation and regulations to comply with, the impact of sustainability on customers and lessons learned during the sustainability process. Interviewee 20 emphasises that the ownership, commitment and enthusiasm of decision-makers in the organisation are crucial to the success of sustainability projects. Money and laws and regulations also play an important role in decision-making and implementation.

Interviewee 20 describes ongoing sustainability projects within the organisation, including making the property more sustainable, greening the operating theatre, moving from linear to circular waste management and developing a sustainable procurement policy.

Interviewee 21 and Interviewee 22 - WIJdezorg

This interview took place at the headquarters of WIJdezorg in the province of Zuid-Holland. Interviewee 22 picks me up at the entrance and we walk up the stairs to the second floor. When I say that the building looks very new and nice, Interviewee 22 replies that the building is indeed new and completely energy neutral. The building is very light because most of the walls are made of glass. Arriving at the office, I notice a poster of a new construction plan for one of WIJdezorg's sites. Then I find a newsletter with an article about the Green Deal and the MTZ. Interviewee 22 gives me the newsletter and says you can keep it for your research. (S)he adds to the newsletter a tear-off calendar with a sustainability fact or tip for everyday use that they gave each employee in their Christmas package last year.

As soon as Interviewee 21 enters the room, the interview begins. Interviewee 22 is responsible for general matters, in other words, (s)he is the general manager of the entire organisation. Interviewee 21 is responsible for the strategy, planning and implementation of sustainability measures in the organisation. They both talk a lot about their work and seem very enthusiastic about sustainability.

At WIJdezorg, they make intensive use of the MTZ and last year achieved silver certification for all their sites. Interviewee 22 and Interviewee 21 say they have been blessed with the fact that they renovated their buildings a few years ago, when it was much cheaper than it is now. Interviewee 22 is convinced that the elderly care organisations' properties will require the most time and effort in the greening process. Changing behaviour is also seen as a major challenge for the organisation to get everyone involved, although most people are highly motivated.

Interviewee 22 and Interviewee 21 work with one other person at WIJdezorg to implement and secure sustainability in the organisation. They work with a number of organisations in their neighbourhood and look up to the Alrijne Hospital in their area, which has the MTZ Gold Label. However, as the certification has to be guaranteed, they now want to focus on keeping the silver label and making sure that everyone in the organisation is involved and that the sustainable way of working is the standard way of working.

If you ask Interviewee 22 and Interviewee 21 what they think of the Green Deal, they say it is really for show. Although it is a non-binding agreement, they hope that the actors can learn from each other and inspire others.

Interviewee 23 - tanteLouise

Interviewee 23 is a sustainability consultant at tanteLouise. (S)he has been working as a sustainability consultant at tanteLouise since April to create a vision for sustainability and a framework within which the organisation's sustainability policy can be implemented.

According to Interviewee 23, tanteLouise is still at the beginning of the sustainability process. They are in the process of making their properties more sustainable and are working on awareness campaigns and changes in procurement policy. Interviewee 23 also emphasises the importance of working together and sharing knowledge and experience with other organisations in the elderly care sector.

(S)he refers to the Green Deal as the cornerstone of Tante Louise's sustainability policy. Interviewee 23 sees it as a way of working on specific issues and facilitating collaboration with other organisations and suppliers.

Interviewee 23 states that she is a member of several networks and has contacts with other health organisations in the region. (S)he is also involved in national networks, such as MPZ, where (s)he shares experiences and ideas with other sustainability professionals. Interviewee 23 stresses the importance of working together regionally and nationally to encourage and help each other.

The aim is to integrate sustainability throughout the organisation and Interviewee 23 works with different departments such as Facilities, Real Estate and Procurement. There is a central steering committee where decisions are made and reported to the board. They are also working on setting up Green Teams and each site has a site manager who is responsible for certification and sustainability initiatives at site level.

Interviewee 23 explains that his/her role is mainly one of coordination, setting up projects and managing several project managers. The aim is to get everyone in the organisation on board by creating awareness and integrating sustainability into daily practice.

According to Interviewee 23, the Green Deal provides tools and a concrete framework to work with. It helps to create collaboration and speak the same language.

Interviewee 24* (answers via email) - Omring

- *Why did you decide to sign up to the Green Deal?* Important to support this movement towards sustainable care

- *How do you work on sustainability on a daily basis?* The CSR programme runs projects in the area of 'people, planet and prosperity', for example on diversity and inclusion, making our real estate more sustainable, working with suppliers and making our purchasing more sustainable.

- *What are your sustainability targets for the coming months?* We are working towards our 2026 goals step by step, for example in the areas of climate (climate positive by 2050) and circularity (maximally circular by 2050).

- *Do you work (a lot) with other (elderly care) organisations?* We have a working group with several long-term care organisations in which we exchange information and experiences, there is also a group within ActiZ that is active in the field of sustainability, within VGZ and with MVO Nederland. In the region, we work together with various healthcare providers and suppliers.

- *What are the challenges in the sustainability process?* There is a lot to do, but not everyone has the same level of knowledge, so change is slow.

- *Does a partnership help to take steps towards sustainability?* Absolutely, we cannot solve the challenges we face alone.

Interviewee 25* (answers via e-mail) - Zorgverzekeraars Nederland

- *What role do you see for health insurers/care providers in the sustainability process?* Sustainability is a responsibility of the healthcare providers themselves. If we compare it to the quality of care, health insurers and care offices help to make individual providers aware of the need for sustainability and can be a first point of contact for a provider to gain knowledge (usually referral to further knowledge or sources of help) about sustainability. Health insurers and care offices also see a role for themselves when financial challenges stand in the way of sustainability in the care sector. We can and will then help to organise a solution, and in exceptional cases it is not inconceivable that health insurers/care offices will also 'pull out the purse strings'.

- *What do you see as the role of health insurers/nursing homes within the Green Deal Sustainable Care?* We provide business certainty to healthcare providers through procurement contracts and reimbursement for care. Business certainty is needed to enable investment in business processes, whether this is investment made by the providers themselves or by external funding (banks/investors). Within the Green Deal, we are a party that keeps healthcare providers 'on their toes', challenging them to be more ambitious, critically scrutinising claimed funding and helping to maintain a consistent line and approach across sectors.

- *What is it like working with so many parties involved in the Green Deal Sustainable Care?* It is sometimes difficult, but we are used to it. This also applies to other issues in the healthcare system.

- *How much time per week do you spend on sustainability/Green Deal Sustainable Care?* Formally about 2 days a week.

- *Are you confident that the Green Deal Sustainable Care targets are achievable? If so, how do you think they will be achieved? If not, why do you think they are unachievable?* I believe the CO2 reduction target is achievable. The circularity target is more challenging. This will also be a focus of ZN in the coming years.

- *What do you gain from participating in the Green Deal Sustainable Care?*
  - It forces us to gain knowledge about sustainability.
  - It gives us a voice in health care procurement and at national policy tables.
  - We can show that we do more than just move euros: when problems arise, we want to be part of the solution.
  - It provides health insurers and care providers with concrete action perspectives that they can use to make their own business processes more sustainable, of which care procurement is by far the business process with the greatest sustainability impact. This is important in view of the increasing sustainability pressure on financial institutions (NFRD) and European companies (CSRD).