“Never waste a good crisis”: COVID-19 crisis as a catalyst for energizing government - citizen relationships

Analysing the influence of COVID-19 on the collaboration between local governments and citizens on renewable energy projects in the Netherlands

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I Management summary

Renewable energy projects (REPs) form a practical contribution to the Dutch energy transition. Local governments play a key role in realising these projects. Their collaboration with citizens is important to make these projects successful. However, collaboration is challenged by citizen resistance and misalignment between local governments and citizens, convulating the energy transition. The COVID-19 pandemic further complicated this transition as REPs received less attention. Nevertheless, this study focuses on the opportunities COVID-19 can offer for the collaboration between local governments and citizens on REPs. Hence, the goal of this research is to uncover variables that positively influence collaboration. Subsequently, improved collaboration can lead to more successful realisation of REPs. This leads to the following research question: "What opportunities does COVID-19 offer for the collaboration between local governments and citizens on realising successful REPs?"

Four variables were identified: digital collaboration, trust, environmental concern and mentality shift. A total of 9 focus groups were held. Four focus groups were held with Dutch municipality officials and five with citizens. Statements representing the four variables were presented to the participants. Each statement indicated that COVID-19 positively influenced the variable. The statements were followed by a discussion part to share thoughts and explain ideas. To verify the results, 4 interviews with experts were conducted.

The outcomes show that the variable digital collaboration is most promising for improving collaboration. The lowered threshold facilitates easier engagement. Especially when complemented with physical meetings, digitalisating due to COVID-19 can contribute to better collaboration. However, the effects of the other three variables were smaller than expected. Citizens' resistance is rooted too deeply for COVID-19 to make a difference. Participants could not directly link COVID-19 with trust. Regarding environmental concern, people do come outside more, and for some COVID-19 formed a wake-up call. Nonetheless, this glimmer of concern would not lead to higher willingness to collaborate. Likewise, COVID-19 did impact people's mindset, however, whether this change will be continual is uncertain. Hence, the outcomes of this research do not correspond with the expectations drafted in the theoretical framework. COVID-19 can provide new opportunities for collaboration between local governments and citizens on success realisation of REPs in the Netherlands. However, finding out how to optimally benefit from the dynamic remains challenging.

One important limitation is the unrepresentative research sample, especially for the citizen group. Only citizens with a strong, often negative, opinion participated in the focus group. This might have influenced the outcomes of this study. Furthermore, the online setting of the focus groups obstructed the discussion flow, as it was sometimes difficult to hear or respond to others. Hence, more research with a larger and more diverse sample is suggested. In addition, more research is needed to fully uncover the potential of COVID-19 on collaboration, as this research was unable to do this.

Keywords: Energy transition, renewable energy projects, COVID-19, collaboration, local governments, citizens.

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1. Introduction

1.1 The impact of COVID-19

2020 was characterised by the COVID-19 crisis, introducing people all over the world to a pandemic they never experienced before. COVID-19 heavily disrupted business, mobility and everyday life. The pandemic has become the main topic on every political, economic and societal calendar. Extensive consequences of climate change were sidelined as the pandemic took hold. The renewable energy sector was affected as well (Hosseini, 2020). Hosseini explains that the impact of COVID-19 on manufacturing facilities, supply chains, and companies decelerated the sustainable energy transition. Furthermore, people became preoccupied with new, personal issues. Climate scientist Gergis (2020) explains that when personal safety is at risk, people's capacity to handle the larger existential threat of climate change deteriorates. Because environmental challenges are now more overlooked, the COVID-19 crisis poses short-term and longer term threats to climate change measures, including renewable energy projects (REP). The most evident short-term effect of COVID-19 was the complete removal of climate change issues from the political agenda, as the COVID-19 crisis was deemed a more urgent crisis at the moment. For instance, the planned climate summit in Glasgow has been postponed. Such summits force countries to keep their end of an agreement; they provide a clear deadline and hold countries accountable for their responsibilities. Postponing or cancelling these moments will release pressure from the issue
(Schuttenhelm, 2020).

Another indication of lower prioritisation of climate issues due to COVID-19 is the historically low investment in renewable energy. Major transformations in the world's economy are necessary in order to fundamentally decrease CO2 emissions by 2050. This includes the shift towards more sustainable energy sources (Schuttenhelm, 2020), which requires financial investments and structured policies. However, such investments are not typically made during a financial crisis. COVID-19 has caused a delay in renewables deployment. The impact can for instance be seen in the decline of renewable power capacity due to supply chain disruptions and financing issues (IEA, 2020). Companies providing renewable energy solutions are confronted by loss of sales because of reduced demand. A majority of projects have missed incentive deadlines, and face further delay or even cancellation. The COVID-19 crisis also provided climate sceptics ammunition to plead for prioritising the economy above climate, arguing governments should focus on recovery of the economy, instead of taking measures to combat climate challenges. For instance, the Environmental Protection Agency (EPA) announced to loosen emission standards because of COVID-19 (Royall, 2020). Altogether, the COVID-19 pandemic jeopardizes REPs, despite their vital contribution to the transition to clean energy.

1.2 Collaboration in the energy transition

The Dutch climate policy aims for a reduction of greenhouse gasses with 49% in 2030. However, it seems unlikely this goal can be achieved if the Netherlands does not drastically reduce its CO2 emission. According to the Netherlands Environmental Assessment Agency, the Netherlands must reduce CO2 emissions twice as quickly to achieve the climate goals (Planbureau voor de Leefomgeving, 2020). For instance by investing in sustainable energy. Currently, only 7,4% of energy in the Netherlands comes from renewable energy sources (Centraal Bureau voor de Statistiek, 2019). Low levels of citizen support partly explain this small percentage (Peuchen, Gamboa Palacios, &

Dreijerink, 2019). According to Peuchen et al. (2019), support of citizens is crucial in these projects, as they can 'make or break' a project. An important factor influencing the support for REPs is the relationship between local governments and citizens (Hoppe, Graf, Warbroek, Lammers, & Lepping 2015). According to Hoppe et al. (2015), repeated collaborations, dialogs, and local practices are essential for positive group dynamics and trust in leaders. Only when these factors are present, local energy projects can be successful. These two parties are dependent on each other in order to let REPs succeed; local governments need the support and acceptance of citizens, and citizens need resources the local government can provide (Koirala et al., 2018). However, the relationship between these two parties is far from flawless. The collaboration is challenged by a lack of alignment between local governments and citizens. Local governments try to reach out and involve citizens through engagement in conversation. However, these efforts are often fruitless. Only a small segment of society responds to these calls of action (Schall, 2020). Local REPs are often delayed or adjourned completely due to lack of citizen support ("Draagvlak voor duurzame energie", n.d.). This lack of support poses a threat to the renewable energy transition, as active engagement of end-users (citizens) is essential for decarbonizing the energy sector (Koirala et al., 2018).

1.3 Research questions

The COVID-19 pandemic has further complicated the relationship between local governments and citizens in the energy transition. Due to COVID-19, many participation projects of local governments have been postponed or came to a halt completely (e.g. Eroğlu, 2020). This research sheds light on the impact of COVID-19 on the collaboration between local governments and citizens on REPs. Crises are most often associated with negative impacts, such as negative social and economic consequences. However, this research amplifies the positives outcomes by focusing on the opportunities COVID-19 offers for the relationship between local governments and citizens who are involved in realising REPs. The pandemic can be a turning point, and can accelerate the clean-energy transition (Black, 2020). According to Black (2020), the question is not whether the energy transition was impeded by the COVID-19 crisis, but whether the need to 'build back better' will advance the transition. Researchers hope for a green recovery from COVID-19, perceiving the crisis as the perfect moment for green investments and green stimuli packages for businesses. The Dutch government should not wait with climate investments, but make investments that both combat economic recession and contribute to a sustainable society.

This study examines the negative and positive consequences of COVID-19 for the collaboration between local governments and citizens on REPs, and what this means for the future. The focus especially lays on the positive outcomes of COVID-19 on the collaboration. The aim of this study is to expose the variables that positively impact collaboration. Improving the collaboration impacts the level of success in executing REPs.

Taking the aim of this research into account, the conforming research question is as follows:

"What opportunities does COVID-19 offer for the collaboration between local governments and citizens on realising successful REPs?"

To help answer the main question, the research question is broken down in these sub-questions:

1. What are the positive and negative impacts of COVID-19 in relation to citizen participation?
2. To what extent can the positive effects contribute to a better collaboration between local governments and citizens?
3. To what extent can this improved collaboration advance the successful realisation of REPs?

1.4 Relevance of the study

In 2020, many researchers studied the effects of COVID-19 on the sustainable energy transition (e.g. Barbier & Burgess, 2020; Eroglu, 2020; Hosseini, 2020). Nonetheless, at this point no research has been conducted to discover the influence a crisis, such as COVID-19, poses on improving the collaboration between local governments and citizens in order to realise successful REPs. Hence, this research contributes to science by introducing new knowledge on this field and thereby closing the existing knowledge gap. Scientists can use this study as input for future research on the impact of crises on citizen participation.

Moreover, this research tries to establish the lessons that can be drawn from this crisis. Governments can attain more awareness on how the collaboration between local governments and citizens is affected by a crisis. This provides them the opportunity to learn and accordingly adapt their citizen participation and collaboration strategies and methods. Lastly, consultant agencies such as Over Morgen can use the knowledge acquired from this research as input for advice and strategies intended for local governments that need help with the execution of their citizen participation projects.

1.5 Thesis outline

In order to provide structure, this report is divided in six chapters. In chapter 2, a literature framework provides background information necessary to understand the scope of the research context. The literature framework delves in existing literature on the energy transition, participation and collaboration, and the side effects of crises. Furthermore, this chapter elaborates on the variables that can possibly contribute in improving the relationship and collaboration between citizens and local governments, and that are currently invigorated because of the corona crisis. After that, the research design is explained in chapter 4. The results of the data collection are presented in chapter 5. These results provide input for the discussion and conclusion. The results are discussed in chapter 6. Lastly, chapter 7 provides a conclusion of this research.

2. Theoretical framework

This theoretical framework consists of three main parts. As the energy transition in the Netherlands is the scene for this research, the first part delves into the developments in this field. This section examines the advantages of REPs, what causes resistance to these projects and what role COVID-19 plays. The second part sheds light on participation and collaboration on REPs. The last part discusses the effects of a crisis, focusing on its positive side effects. In addition, the relation between the positive side effects of a crisis and the pitfalls of participation are analysed: can the issues related to participation and collaboration partially be resolved through the positive side effects induced by a crisis? Lastly, the possible effects of COVID-19 on the collaboration between local governments and citizens on REPs are further investigated. This section elaborations on four variables: digital collaboration, trust, environmental concern and mentality shift.

2.1 The energy transition in the Netherlands

Over the past decades, climate change became a pivotal and pressing issue all over the world. Therefore, representatives of 196 states congregated in Paris to come to an agreement on how to combat the impacts of climate change (UNFCCC, 2015). This conference in Paris led to the Paris Agreement. The essential goal of the agreement is to retain the global average temperature below 2 °C. This target is vital for considerably reducing carbon emissions and thereby diminishing the risks and impacts of climate change (UNFCCC, 2015). Each party that signed the agreement had to compose its own plan on how to meet the set targets. The Netherlands is one of the parties that signed the agreement. The Dutch government established, designed and planned their own national policies conforming the Paris Agreement to shift from fossil energy towards the use of renewable energy sources. The government aims to reduce greenhouse gas emissions by almost 50% in 2030, compared to 19990 levels. This takes the country one step closer to becoming climate neutral by 2050. A country is climate neutral when energy processes in this country do not contribute to climate change. This means that CO2 emissions and CO2 absorption balance each other out (Rijksoverheid, 2019). However, the Netherlands still has a long road ahead before reaching this target. In 2019, only 7,4% of energy in the Netherlands comes from renewable energy sources (Centraal Bureau voor de Statistiek, 2019). The Dutch state has appointed municipalities to be the organizers of the energy transition on a local scale (RVO, 2020). This means that municipalities are free to consider how they will control and facilitate the energy transition locally. REPs play an important role in realising the energy transition.

The World Commission on Environment and Development (WCED) defined sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). Realising REPs is one of the practical implications of sustainable development in the world. Renewable energy is generated by resources that cannot be depleted; renewables can be regenerated or renewed (World Energy Council, 2004). Hence, expanding the use of renewable energy is the best method to meet high energy demands while simultaneously decreasing pressure on reserves of natural resources and the environment. REPs are projects employed to reach the set climate goals. For REPs to be considered successful, projects have to be accessible, available and accepted (World Energy Council, 2000). REPs include plans, programs and projects that all lead to attaining the climate goals and thereby becoming a more sustainable country (UNFCCC, 2015).

The COVID-19 pandemic has a major impact on the energy transition all over the world, including the Netherlands. Overall, the corona crisis changed the pace of the energy transition. Less investments were made and projects were deferred (Schuttenhelm, 2020). Eroğlu (2020) researched the environmental and energy impacts of COVID-19. He explains that the outbreak led to delays in supply chains. Additionally, the renewable energy industry experienced difficulties in tax stock markets and faced the risk of not being able to benefit from government incentives. Because of the uncertainty in the energy sector, investors were reluctant to invest. Hosseini (2020) noted that implementation of new REPs will be postponed due to tightened budgets of countries. He explains: "The disruptions of the supply chain will interrupt accomplishment of the under-construction REPs worldwide" (p. 1). Furthermore, the current setbacks are expected to lead to less financing for attaining Sustainable Development Goals post-pandemic (Barbier & Burgess, 2020).

Within the Netherlands, investments in renewables were deferred as well. Many companies faced large economic setbacks. This restrained them from investing in green technologies (Lammerse, 2020). Research from MKB-Nederland (Duurzaamnieuws, 2020) showed that almost 60% of the SMEs in the Netherlands that initially planned to enhance their sustainability renounced these plans. The Dutch Association Sustainable Energy (NVDE) (2020) studied the impacts of COVID-19 on the Dutch energy sector as well. Their findings show that companies active in the sustainable energy sector experience loss of sales. These companies indicate that their clients are detained from investment in sustainable products because of COVID-19.

Nonetheless, COVID-19 can also be a game changer for the energy transition when the right steps are taken. Various researchers suggest that the COVID-19 pandemic can accelerate the energy transition if smart investments are made. Governments play a key role here as they get the opportunity to steer towards a more sustainable economy. As Linares (2020) explained, the recovery phase provides the opportunity to make a deep and lasting impact on the environment. In order to fight COVID-19's deep impact on the economy, large amounts of money should be pumped into the economy. Smart investments can elevate the economy out of the COVID-19 economic recession, while simultaneously moving towards a sustainable society (Broer & Vermeent, 2020). Broer and Vermeent suggested investments in public transport, sustained energy generation and green car charging stations. Linares (2020) emphasized the importance of thoroughly scrutinising the best investment opportunities and thereby taking into account not only environmental benefits but macroeconomic returns and the implementation speed as well. He explains that sustainability goes beyond the environment, attitude changes are required including more respect for the environment and a less consumerist economic model.

Besides making smart investments, governments can influence the energy transition through their stimulus plans for companies. These stimulus packages are meant to support companies during and after the pandemic. These plans should focus on companies' sustainability, for instance through demanding companies to invest in renewables (Broer & Vermeent, 2020). Thereby private companies are persuaded to invest in renewables. This leads to economic development and job creation, as well as emission reduction and further innovation (IEA, 2020).

2.2 Participation and collaboration

While citizen participation forms an important element in the relationship between local governments and citizens and should therefore be mentioned, the main focus of this research lays on the collaboration between local governments and citizens. Although these concepts are directly intertwined and often used interchangeably, they do not represent the same.

Citizen participation has become a popular measure in policymaking the past years. Whereas it used to play a small role in policymaking, nowadays citizen engagement is popular for civic rejuvenation and environmental policy innovation (MacArthur, 2016). Policymakers realised the importance of involving citizens in the planning and executions of plans that concern the local community. Especially in order to decarbonize the energy sector, engagement and support of end-users in this system is vital (Koirala et al., 2018).

A clear definition of citizen participation does not exist, however, it is often referred to as the "involvement in any organized activity in which the individual participates without pay in order to achieve a common goal" (Zimmerman & Rappaport, 1988, p. 726). Another definition, of Verba and Nie (1987) states that citizen participation is "an instrumental activity through which citizens attempt to influence the government to act in ways the citizens prefer" (p. 102). Citizens can for example be involved through being part of advisory boards, voluntary organisations, and service activities.

Collaboration includes partnerships and cooperation between local governments and citizens. Citizens are thus viewed as "partners in the design and delivery of public policy and services" (Sullivan & Skelcher, 2002). Citizen participation can function as a precedent for collaboration. Participation is a sign of engagement, commitment, and personal investment; inhabitants' participation can potentially increase commitment to a project, as it provides a stronger sense of ownership. In addition, participation has the ability to increase stakeholders' belief in, and acceptance of, the cooperative project, as they can voice their opinion and feel listened to (Wagemans et al., 2019). These feelings of responsibility, commitment, belief, engagement and personal investment, together with the preconditions openness, transparency and accountability are expected to stimulate collaboration between people and groups.

The last few years, governments progressively recognised the importance of employing citizen participation in their policy and project planning and execution. Calls for engagement and community power are heard especially in the field of energy transition (MacArthur, 2016). Citizens can play a large role in the transition toward renewable energy through their support for or resistance to shifts in the heating system. Furthermore, citizens can be producers of renewable energy themselves (Van der Schoor, 2016). Through involvement, citizens are able to voice their opinions, feelings and concerns, which enables a feeling of being understood (Claridge, 2004). This creates a support base necessary for solving sustainable resource management issues (Chamala, 1995). Thus, in theory, including citizens through participation helps in reducing resistance (Young & Brans, 2017). In addition, Mees, Uittenbroek, Hegger, and Driessen (2019) explained that more active involvement asks for a different relationship between citizens and local governments, increasing responsibility feelings. They imply that the shift of responsibilities towards citizens require governments to become more collaborative and responsive (Aylett, 2013). In addition, citizen participation is important for citizens to feel included, increase legitimacy of decisions, and

encourages civic skills and virtues (Michels, 2011). Rogers, Simmons, Convery, and Weatherall (2008) support that inclusion of citizens through participation stimulates skills, as it enhances understanding of sustainable energy issues, leading to acceptance. Lastly, Kelly (2001) states that learning is a result of participation as well, which is essential for changing behaviour and practices. Thus, citizen involvement through participation is fundamental in order to attain local citizen acceptance (Young & Brans, 2017; Knoefel, Sagebiel, Yildiz, Müller, & Rommel, 2018).

Collaboration goes beyond working together, rather it means achieving together (Cox, 2011). Citizens are, just like local governments, stakeholders in the project who have to believe in the project in order for it to be successful (Lennon, Dunphy, & Sanvicente, 2019). Therefore, collaboration with this group is important. The energy transition consists of many projects, all having the same goal of reducing CO2 emission. Local governments are partially responsible for the execution and coordination of these projects. However, local projects cannot be achieved without the support of citizens. Especially issues regarding sustainability require the involvement of the public (Wagemans et al, 2019), as their lives can be affected by these changes. Increased levels and quality of collaboration has various benefits that increase the chance of successfully realising REPs, for instance more and higher productivity (Cooke, 1989). Collaboration with other parties provides access to new networks of people, both beneficial for inhabitants as local governments (Wagemans et al., 2019). All together, this leads to smooth and efficient collaboration, elevating levels of productivity and effectiveness necessary for successful realisation of REPs.

However, despite the high importance of citizens' collaboration in energy projects to sustain the ongoing energy transition, local governments are often met with resistance (Koirala et al., 2018). Initially, REPs receive high levels of support from citizens. However, as soon the projects are implemented in the citizens' living environment, levels of acceptance and support significantly decrease. Fraune and Knodt (2017) researched this contradiction, explaining: "This gap between considerable support for renewable energy policies at the national level on the one hand and decreasing or absent acceptance of renewable energy technology expansion at the local level on the other is often attributed to the "not in my backyard" (NIMBY) phenomenon" (p. 257). Different reasons can be behind this attitude change.

Rogers et al. (2008) argue that public resistance often stems from "inappropriate scale of development, an unacceptably high ratio of local costs to local benefits and a lack of adequate communication and consultation with local residents by developers" (p. 4217). Furthermore, Langer, Decker and Menrad (2016) found visual landscape degradation as a reason for growing resistance for energy projects. Shaw et al. (2015) found that opposition originated from inadequate governance of energy development. Citizens believe that governments promote energy developments with the wrong reasons. MacArthur (2016) pointed out in her study that policymakers employ participatory mechanisms as symbolic acts. Policy makers also misuse the term participation, restricting it to clear policy boundaries, limiting the input of citizens. The lack of genuine concern for citizens' opinion is detrimental, resulting in feelings of skepticism, manipulation, and despondency instead of effective engagement (MacArthur, 2016). Hence, citizens lose trust in the government to reflect and protect their social and ecological values. The relationship between governments and citizens is thus far from perfect.

Moreover, the quality of collaboration is influenced by local governments' estimation of the importance of citizens' input and the importance of being sincere in their relationship regarding the implementation of collaboration processes. These processes are often underestimated, which leads to policy makers underestimating the amount of time, energy and conflicts that emerges when various groups are involved (MacArthur, 2016). Collaboration with another group is complicated, especially when knowledge levels differ from each other. Initiators of a project, in this case local governments, are often more familiar with the topic of interest, and are better aware of the context. In contrast, citizens have less knowledge about the on-going business. These factors lead to citizens feeling as if they are not taken seriously and complicate collaboration. For example, Walsh (2016) explained that citizens often feel that they do not have an equal say in the planning process or that they miss a mutual dialogue between powerful stakeholders such as the involved local government and the local citizens. Goedkoop and Devine-Wright (2016) add that this perceived lack of equality in decision-making concerns the community actors, who deem the large stakeholders as making most of the decisions and only consulting citizens after the fact.

Lastly, differences in expectations can lead to collaboration issues. Citizens seem to be more retiring and awaiting than local governments expect. Jansma, Gosselt and De Jong (2020) emphasize in their research that citizens are not willing to be engaged in every step of the process. They rather take a more passive role and act as consultants instead of project leaders (Rogers, et al, 2008). Citizens perceive the local government as the responsible actor for realising the energy transition (Jansma et al., 2020). This desertive attitude can possibly have an inconductive effect on the collaboration between local governments and citizens.

2.3 Positive side effects of crises

A crisis is in general associated with negativity. The word 'crisis' in itself contains a negative sentiment, and comes with socio-economic implications. All sectors experience the consequences of COVID-19, including the health sector, tourist sector, agriculture sector, education sector and food sector (Nicola et al., 2020). For instance, the healthcare sector had to endure great pressure because of the high amount of COVID-19 cases, while also being at risk to get infected themselves, putting healthcare workers in a difficult position (Tanne et al., 2020). Moreover, educational facilities were forced to close their doors, impacting the quality of education. Despite the negative impacts, a crisis can also induce positive side effects. These effects are underexposed.

For instance, COVID-19 temporarily released pressure from the climate. Zambrano-Monserrate, Alejandra Ruano, and Sanchez-Alcalde (2020) explored the indirect effects of COVID-19 on the environment and found a decrease in greenhouse gas emissions and less waste produced by tourists. Nelson (2020) explained that air pollution has been significantly reduced the past months, partly due to less traffic on the roads and in the air. This reduction in pollution benefits peoples' individual health as well (Nelson, 2020). According to the WHO (2020), the COVID-19 pandemic emphasized the deep inequalities around the world regarding the access to modern, affordable and sustainable energy. The crisis offers the opportunity to scale up sustainable energy for a sustainable recovery from COVID-19. Besides offering global environmental benefits, COVID-19 influences individuals' behaviour as well. A crisis places people in a plight, testing their resilience and ability to adapt to the new situation (Karelakis, Abas, Galanopoulos, and Polymeros, 2013). Furthermore, although a crisis shakes people's lives and brings commotion, a crisis often means standstill as well. For instance, due

to COVID-19 people were unable to go to work, go on vacation, and visit friends and family. This created time to tackle issues that were not prioritised before.

Although the above described examples are not directly related to the opportunities of COVID-19 for the collaboration between local governments and citizens on REPs, they do show that a crisis can also promote positive processes. A crisis requires flexibility and change, and thereby tests people's resilience and versatility. A crisis invigorates change in behaviour. There are initiatives that would not have taken off without the presence of a crisis. The crisis offers several learning moments that invite people to review how society works and how it can be improved. A crisis can function as a gateway to improvement, strengthening the idea that a crisis offers useful positive side effects. Thus, it could be possible that the corona crisis offers opportunities for the collaboration between local governments and citizens on REPs.

2.4 Possible impacts of COVID-19 on local government-citizen collaboration

COVID-19 showed that large changes are possible, with both positive and negative outcomes. Lessons learned during this crisis period should not be forgotten as soon as the cure is found and everything goes back to 'normal'. Rather should these lessons be incorporated. This section explores the opportunities presented by COVID-19 by analysing four variables. These variables play a role in collaboration between local governments and citizens. Furthermore, these four variables are subject to change due to the COVID-19 crisis.

2.4.1 Opportunities of digital participation

The first factor that influences collaboration is digital participation. COVID-19 changed the way people collaborated. Forced to stay home, people were appointed to digital forms of communication, participation and collaboration. This increased use of digital communication platforms and accelerated innovation of these platforms. This section explores digital communication, advantages of digital participation, requirements of successful digital participation and the effects of COVID-19.

Digital platforms are often employed by governments to inform and engage citizens, and is known as a useful tool to promote citizen participation in general (Lee & Kim, 2018). Digital communication is also often referred to as e-participation, which is defined as "the use of ICTs to support information provision and "top-down" engagement i.e. government-led initiatives, or "ground-up" efforts to empower citizens, civil society organisations and other democratically constituted groups to gain the support of their elected representatives" (Macintosh & Whyte, 2008, p. 2). E-participation is characterized by its many advantages. First of all, e-participation applications make it easier for citizens to access and gain information because of their easy-to-use and effective functions. Easy access helps in decreasing information asymmetry between local governments and citizens. This asymmetry relationship exists because citizens are less involved in government activities than governments themselves. An e-participation platform provides citizens access to information about government activities, decreasing the information gap while simultaneously motivating citizens to get involved. Moreover, knowledgeable citizens can provide new insights and helpful suggestions to governments (Yang, 2009). Easier access through e-participation platforms help governments to reach a wider target audience as well (Milakovich, 2010), including the people who usually do not respond to local governments' attempts for engagement. The threshold to participate in an activity

organised by a local government is lower, thereby making it easier to engage 'hard-to-reach' citizens (Froonjian & Garnett, 2013). Shy people can remain anonymous, Milakovich (2010) explains: "The empowering capability of ICTs is centered on their ability to permit previously marginalized individuals and groups—who would otherwise be silent and invisible—to be heard and seen. By doing so, ICTs reveal the diversity in society, a range of opinion that has always existed, but was previously without voice in public decision making." (p. 3). And lastly, this type of participation is much cheaper (Sodikin, 2020). Hence, digital platforms are an important tool to facilitate interaction between local governments and citizens.

In order for e-participation to be successful, governments have to be perceived as responsive and transparent (Kim & Lee, 2012; Lee & Kim, 2018). Participants' satisfaction with e-participation programs is partly based on the government's responsiveness, showing they value e-participants' needs and their input. Participants need this validation in the form of interaction and communication, especially considering e-participation is online, limiting interaction which makes the process less personal. Therefore, it is important to be responsive, to prevent participants from losing interest in, and willingness to participate. This also works the other way around: a responsive government reinforces e-participants' commitment (Lee & Kim, 2018). Participants' satisfaction with the local government's degree of responsiveness will increase their assessment of the government's transparency. Participants are more willing to engage in participation projects when they perceive the local government to be transparent (Lee & Kim, 2018).

Despite the benefits of digital communication platforms, local governments did not often employ this tool for engaging citizens in the past. E-participation projects often failed, partly due to lack of interest from citizens (Le Blanc, 2020). Moreover, part of the population experience difficulties with participation in e-participation activities, for instance because of lack of experience with technology (Toots, 2019). However, due to COVID, activities had to be shifted to an online environment (Razif et al., 2020). This shift increased the acceptance of working from home technologies (Razif et al., 2020). Local governments also relied on online platforms in order to continue participation projects. As a consequence, both parties gained a more positive attitude towards virtual collaboration (Labosier, 2020). Embracing digital participation platforms led to higher levels of inclusion, meaning more people were able to provide their opinion regarding ongoing REPs (Conrad, 2020). Because the total population can be represented better, local governments might become better aware of what citizens really think and want. Taking these needs into account can create more goodwill and higher levels of motivation to stay or become engaged. More goodwill and higher levels of motivation, in their place, might contribute to a smoother collaboration between local governments and citizens. Thus, the increased use of digital platforms due to corona has the potential to increase citizen participation both during and after the COVID-19 era.

2.4.2 Increased levels of trust

Another factor influencing the dynamic between governments and citizens is the level of trust. Trust is defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another" (Rousseau, Sitkin, Burt, Camerer, 1998, p. 395). Trust has been proven to increase citizen participation or engagement in general (Tyler & Degoey, 1995). Lee and Schachter (2019) examined the influence of trust in a government on citizen participation and found that trust increases citizens' confidence that their participation is

useful. When citizens consider their government as untrustworthy, they are likely to refrain from participating as they think their opinions will not have an influence. Carreira, Reis Machado, and Vasconcelos (2016) accentuated this point, stating that drawbacks of citizens are directly related to lack of trust in governmental institutions and politicians.

Trust plays an important role in constructing mutual respect and reciprocity, which fosters collaboration and the development of social capital (Misztal, 1996). In the same line of reasoning, Yildiz et al. (2015) explained that trust is essential for stable relationships, maintenance of cooperation, vital for any exchange, and building social capital. Walker, Devine-Wright, Hunter, and Evans (2010) emphasize this, stating "trusting social relationships support and enable cooperation, communication and commitment such that projects can be developed and technologies installed in ways which are locally appropriate, consensual rather than divisive, and with collective benefits to the fore" (p. 2657). Not only is trust in the project initiator of importance, mutual trust between citizens is a decisive factor as well (Kalkbrenner & Roosen, 2015). That is, higher community identity is associated with higher levels of trust, which will smoothen the collaboration within communities, but also with the government. Furthermore, trust is not only a determinant of collaboration, but a potential outcome of cooperative behaviour as well (Kalkbrenner & Roosen, 2015). Goedkoop & Devine-Write (2016) emphasize this statement, explaining trust is self-reinforcing: "initial trust leads to cooperation, which in turn leads to increasing levels of trust" (p. 138). This means that reinforced trust leads to reinforced collaboration.

REPs face resistance from citizens who do not accept or support the changes in their living environment. However, trust can be a decisive element in this matter. Several researchers investigated trust as a predictor for citizens' acceptance and willingness to participate in energy projects. Trust in responsible agents is crucial for acceptability of and engagement in REPs, as citizens need to rely on these actors who initiated the project (Liu, Bouman, Perlaviciute, & Steg, 2019). When citizens are asked who is responsible for the energy transition, they point towards the local government and directly connect this with the question whether they trust this actor, and whether they perceive the local government as capable of realising the energy transition (Jansma et al., 2020). Wüstenhagen, Wolsing and Büren (2007) identified trust as a key factor in regard to gaining public acceptance for renewable energy innovations as well. They explain that trust is closely related to process fairness and outcome fairness. When outcomes are not perceived as fair, they can result in damaged relationships and divided communities. Trust can contribute in enhancing perceived process fairness and maintaining or restoring relationships. Citizens' change in attitude affects the attitude of the involved local government as well. Practitioners put much effort in the trust relationship with citizens and noticing this new motivation in their citizens encourages them to put more effort in the energy projects as well (Yang & Holzer, 2006), resulting in better performance from their side. As a consequence, this increased quality of governance will lead to more trusting citizens (Bouckaert & Van de Walle, 2003).

Pollings showed signs of increased public trust in institutions amid the COVID-19 pandemic (Funk, 2020). Within the same regard, Dutch citizens expressed higher levels of trust in the VVD (the leading party in the Dutch parliament). Voters show more trust in party leader Mark Rutte's functioning than before the COVID-19 crisis (76% relative to 40%), and appreciate his determination (Kester, 2020). These findings are supported by a recent study of Ipsos in September 2020, that found that the Coronavirus crisis has a positive effect on citizens' support of the parliament. Dutch citizens grade

the functioning of the parliament with a 6.2, significantly higher than previous years. In addition, Dutch people agree with the way Mark Rutte and minister Hugo de Jonge handle the Corona crisis situation (Ipsos, 2020). This revived trust in political institutions might benefit the collaboration between citizens and local governments, and thereby accelerate the renewable energy transition.

2.4.3 Increased environmental concern

The collaboration between citizens and local governments is influenced by the level of environmental concern as well. Environmental concern is an evaluation of, or an attitude towards facts, one's own behaviour, or others' behaviour with consequences for the environment (Ajzen, 1989). Environmental concern has been proven to affect a person's attitude towards the environment. Most evident, higher environmental concern has a positive effect on pro-environmental behaviour. Consequently, environmental concerns and awareness are one of the primary drivers for supporting local energy projects (Kalkbrenner & Roosen, 2016). Therefore, environmental concern is an important predictor of willingness to participate in local REPs (Koirala et al., 2018). For instance, consumers that are more concerned about the environment are willing to pay more for renewable energy as opposed to people who are less concerned (Bang, Ellinger, Hadjimarcou, & Traichal, 2000).

Especially in the earlier phases of a participation project environmental concern can play an important role, as environmental awareness correlates with motivation to search for information (Broers et al., 2019). Furthermore, both Kalkbrenner and Roosen (2018) and Prasad Koirala et al. (2018) found that environmental concern affects citizens' willingness to participate in community energy systems, and is therefore an essential building block in initiating new projects. In other words, environmental concern gives rise to an internal motivation to change behaviour, which includes willingness to be actively involved and engage in REPs. This involvement based on intrinsic motivation is crucial, as citizens will have the same goal as the local government who initiated the project. Two parties being on the same page smoothens communication which promotes the co-production process, and thereby enhances the quality of collaboration (Li & Wen, 2019).

A crisis can have a huge impact on behaviour, leading to change in behavioural patterns. Subsequently, change in behaviour can affect nature and the environment (Rousseau & Deschacht, 2020). Rousseau and Deschacht (2020) explain that "the crisis goes hand in hand with a positive shift in public awareness of nature-related topics" (p. 1149). Because of people's expressed concern regarding environmental challenges, they have shown more commitment to changing their own behaviour to advance sustainability (Kachaner, Nielsen, Portafaix, & Rodzko, 2020). For instance, the survey results of Kachaner et al. (2020) showed that COVID-19 contributed to raised awareness amongst respondents, who have become more aware that human activity threatens the climate, and that degradation of the environment threatens humans. Participants intended to adopt more sustainable behaviour in the future and also expected companies and governments to arrange their strategies in favour of the environment (Kachaner et al., 2020). Furthermore, COVID-19 forced people the past months to alter their activities. People had to work from home, and were unable to practice their regular sports and hobbies. Hence, people picked up other activities, such as daily walks, runs and gardening in order to retain a sense of connection with the outside world (Whitburn, Linklater, & Milfont, 2019). Thereby, people gained more experience with nature. Being in nature has been associated with increased appreciation for nature (LaRiviere et al., 2014). More time spent in nature and increased appreciation boost people's willingness to care and protect nature (Schultz,

2002; Lo & Jim, 2010). This could also mean that people are more inclined to support programs and projects focussed on renewable energy. Overall, environmental concern is known to accelerate behaviour change in favor of the environment, and can therefore play an important role in improving the collaboration between citizens and local governments on REPs.

2.4.4 Mentality shift

COVID-19 indirectly induces a new sense of solidarity, which evoked a mentality shift. The term solidarity is described by Williams (2009) as "the relationship or dynamics within a community, and the commitment towards cooperation, support and (re)distribution so as to ensure that less fortunate members of the community are provided for" (p. 5). Solidarity calls for cooperation and support. Many global issues, such as climate change, require effective cooperation in order to come to a solution. Solidarity namely assists in creating a context for meaningful cooperation (Williams, 2009).

Solidarity finds its ground in a good community base. The description of Williams already emphasized the presence of a community from which solidary emerges. Solidarity arises in groups with people that share certain characteristics (Williams, 2009). It is important to accentuate this scope, as REPs are always integrated within a community. Hence, the acceptance and support of the community is important. Moreover, local REPs are especially successful within communities with a high community identity. People within these communities feel a bond with the community and take pride in being part of it (Kalkbrenner & Roosen, 2016). This strong connection leads to better collaboration between members of the community and willingness to undertake action.

An indirect link between community feeling and collaboration exists. That is, a high sense of community leads to trust (Christens & Speer, 2011). According to Flanagan (2003), there is an interaction effect between community identity and general trust. He explains that being part of a community shows people what it means to trust and to be trusted. Trust is especially important in dependency relationships (Mommers & Berger, 2020). Accordingly, "trust between local people and groups that take forward projects is part of the package of conditions which can help projects work and for local people to feel positive about getting involved and about the process of project development" (Walker et al., 2010, p. 2662). Local REPs profit from a high community feeling, as citizens are able to better cooperate and are more willing to make their community a better place (Hoffman & High-Pippert, 2010). Furthermore, community energy projects can facilitate solidarity with the community (Bomberg, 2012). Solidarity can be the outcome of local energy projects as well (Van der Horst, 2008). Thus, solidarity and communities are inherently intertwined in the process of realising REPs.

One characteristic of a crisis is its capacity to generate drastic change. Hence, COVID-19 can possibly strengthen the above described process of solidarity leading to better collaboration. Because of COVID-19, people became more aware of their dependency on nature and on each other. People realised how vulnerable they are, emanating a shift in priorities (Solnit, 2020) determining what is important and valued. COVID-19 could lead to the realisation that everything is connected (Solnit, 2020). This can result in people becoming less individualistic, as every citizen is part of society and has to work together to conquer the same threat, which is in this case COVID-19 (Kalse, 2020). This

new sense of togetherness and responsibility can have far-reaching benefits (Modéer & Ryott, 2020), conceivably also to the extent of actualising REPs.

2.4.5 Summary of the variables

The literature review above provided an in-depth context for this study, including more information about the energy transition in the Netherlands, participation and collaboration and the impact of COVID-19. Table 1 displays the four variables of this study and the effects of COVID-19.

Table 1

Variables influencing collaboration on REP's that are positively affected by COVID-19

Variable	Impact
Digital collaboration	COVID-19 forced digital collaboration, leading to more acceptance of digital tools. These tools have the ability to reach a wider audience, thereby representing the wishes and opinions of citizens. Because these wishes are more visual, local governments are better able to implement what citizens really want. This creates goodwill and thereby better collaboration.
Trust	Trust is essential for successful collaboration. COVID-19 induces more trust in the Dutch cabinet. Local governments play an important role in responding to COVID-19, which can also lead to more trust in the Dutch government at the local level. This can smoothen the collaboration between the two parties.
Environmental concern	COVID-19 made people realise their dependency on nature, giving rise to more environmental concern. This could lead to more pro-environmental behaviour and intrinsic motivation to participate in REPs. Citizens and local governments being on the same page can improve their collaboration.
Mentality shift	COVID-19 increased awareness of people's dependency on nature and on each other, giving rise to a mentality shift. People became more concordant and felt more like a community. Another part of this mentality shift is a priority shift: 'what is really important to me?'. These realisations made citizens more open for collaboration.

3. Methodology

The methodology chapter discusses the method selected to answer the research question. This chapter is subdivided into three sections. The first section provides an outline of the methodological approach, explaining the research design. In the second section the rationale of the chosen data collection method is described, as well as how the data was collected. This section also elaborates on the research participants. Lastly, the third section clarifies the method used to analyse the data.

3.1 Methodological approach

In order to answer the research questions, understanding of possible change in collaboration dynamics between local governments and citizens in Dutch municipalities in times of COVID-19 is required. This research took an explorative, qualitative approach. This direction seemed most befitting for the nature of this study. As mentioned in the introduction, no research has been conducted to discover the influence that a crisis, such as COVID-19, has on improving the collaboration between local governments and citizens in order to realise successful REPs, in particular in the scope of the Netherlands. Exploratory research is useful in cases where researchers try to gain new insights about a phenomenon (Babbie, 2007). As explorative research involves value judgements and ethical considerations (Bocken, Rana, & Short, 2015), qualitative data was used to answer the research question. A qualitative research method provides more detailed information than quantitative methods. This topic requires in-depth conversations to fully comprehend the situation and be able to draw conclusions. Hence, understanding the processes, influences, context and individual experiences is essential (Hennink, Hutter, & Bailey, 2020). Therefore, data was collected through conducting several focus groups, verified with expert interviews.

3.2 Data collection method

3.2.1 Focus groups

Focus groups are organised discussions between a group of selected individuals. As discussions tend to become disorderly, the discussion topics were predefined and limited, and facilitated by a monitor (Blackburn, 2000). Focus groups generate data through interaction in which different perspectives are brought together (Gibbs, 1997). This collective activity stimulates snowballing of ideas, which again can provoke new ideas (Blackburn, 2000). These ideas would not arise without this synergistic group effort. In addition, this group activity generates data of a range, depth, specificity, and personal context that could not be achieved through other research methods (Blackburn, 2000). Focus groups are especially suitable for research concerning broad topics about which participants still have to establish or clarify their opinion. Interaction with other participants helps them to clarify their own ideas, opinions and priorities (Berkes, 2004).

In January and February 2021, a total of nine focus groups were conducted, of which four were held with Dutch municipality officials, four with citizens and one with young citizens between the age of 18 and 35. As the native language of both the researcher and participants was Dutch, this language was used during the focus groups. Because of the COVID-19 restrictions at the time of data collection, the focus groups were conducted in an online setting, using Microsoft Teams. The video recording function integrated in the program was used to record each session. The focus group session lasted approximately 60 minutes. A pre-test was held prior to the focus groups, to pinpoint

potential problems, reduce errors, and determine whether participants would interpret the statements correctly.

The focus groups consisted of three segments. In the first part, the researcher introduced herself and the study. In addition, the participants introduced themselves, using the online interactive presentation tool Menti.com. This served three functions. First, the researcher got to know the participants better. Secondly, the participants got familiar with using the online tool. Thirdly, this first acquaintance ensured that all the participants had spoken before the actual discussion part started. This might lower the threshold to share opinions. Furthermore, the researcher explained what was expected from the participants in the second portion of the focus group. The second part of the session consisted of the participants discussing with each other. The four variables digital collaboration, trust, environmental concern and mentality shift, were translated into four statements (table 2). This provided structure to the session and prevented the conversation from wandering off. Each statement stated that the variable was positively influenced by COVID-19. Through a 5-point Likert scale the participants could indicate whether they agreed or disagreed with the statement. These statements functioned as a trigger for participants to think about the topic and form an opinion. Following, the researcher asked the participants to expound on the given rating and elaborate on their experiences prior and during COVID-19. During the discussion, the researcher had a moderating role.

Table 2.

Statements used during the focus group sessions using a 5-point Likers scale

Variable	Statement
Digital collaboration	“Digital collaboration during corona is better than before corona”
Trust	“There is now more trust in the local government than before corona”
Environmental concern	“There is more environmental concern during corona than before corona”
Mentality shift	“Corona induced a mentality shift”

Participants

Municipality officials and citizens were invited to take part in a focus group, as this research revolves around the relationship between these two parties. In each focus group, three to five people participated. A relatively small group size was chosen since a group conversation with more people in an online setting was expected to get unorganised. Four focus groups included only officials, and the other four focus groups consisted of only citizens. Officials from municipalities Hoorn, Hoeksche Waard, Medemblik, and Vught, Boxtel and Sint-Michielsgestel (the latter three participated in the same focus group) were invited to participate. These officials act as program manager, project leader, communication consultant or sustainability consultant. In their daily tasks these officials are involved in sustainability projects and are in contact with municipality inhabitants. Citizens living in municipalities Hoorn, Den Bosch, Medemblik and Vught, Boxtel and Sint-Michielsgestel were invited as well. Participants were recruited from these specific municipalities as the researcher was already acquainted with some of the respondents. Citizens that had experience with collaboration on

sustainable energy projects with their local government were invited for the citizen focus groups. Additionally, one focus group with youngsters was organised as their opinions and experiences were not yet included in the citizen focus groups, despite the extensive impact of the energy transition on their lives now and in the future. Hence, members of JongRES, a youth organisation representing the interests of youngsters regarding the RES, were approached.

Possible local government participants were identified through the use of Over Morgen employees' networks. Then, these officials were invited via email and called by absence of a reply to this email. Not only were these officials asked to participate in a focus group, they were also asked to use their network to help find citizen participants. Subsequently, these citizens received an invitation to participate as well. JongRES was approached through emailing various members. These members were identified via the researchers' Over Morgen network. In total, 38 people participated (Appendix I). An additional email was sent to the people that agreed to participate, including more information regarding the focus group. An informed consent form was attached to this email. The consent form included information regarding the research goal, the course of events, participants' rights and it named the potential risks associated with participating.

3.2.2 Expert interviews

The focus groups were validated with four expert interviews to strengthen the research project, by presenting them the initial outcomes of the local government and citizen focus groups. Follow-up individual interviews can provide more depth and detail on the topics discussed during the focus groups. Expert interviews are interviews with specialists in the subject in question (Libakova & Sertakova, 2014). These people have a rich insight in aggregated or very specific topics (Van Audenhove, 2007). These interviews are in particular useful for gaining additional unknown, reliable information and for professional assessment (Libakova & Sertakova, 2014). Hence, sustainable energy consultants were invited for an interview. These consultants observe the effects of COVID-19 on the relationship between local governments and citizens on a daily basis. This enables them to assess whether the dynamic described by the focus group participants corresponds with other municipality - citizen dynamics. The interviews were conducted in a semi-structured manner, based on an interview guide (Appendix II). The open nature of the questions allowed the interviewer and interviewee to delve deeper into the topics.

The four experts were interviewed in February 2021. As Dutch was the native language of all the interviewees, this language was used. Microsoft Teams was used for organising and recording the interviews. Every interview lasted 45 to 60 minutes. The interviews were divided into five sections. Firstly, several introduction questions were asked to become more familiar with the expert's knowledge and experience level. The remaining four sections discussed the four factors - digital collaboration, trust, environmental concern, and mentality shift - that were presented to the focus group participants as well. The most relevant outcomes of the local government and citizen focus groups were shared with the interviewee. The interviewees were asked to respond to these outcomes: do they recognize these trends, what do they think, how would they handle these situations?

Participants

Four Over Morgen employees active in projects involving local government - citizen collaboration were invited for an interview. Each expert had his or her own expertise, such as a participation expert working on a participation strategy for several municipalities with experience in organising both physical and online citizen meetings. Another employee had experience with various regional collaboration projects, for instance in the eastern region of the Netherlands.

3.3 Analysis

The first step in the analysis process was transcribing all the video recordings. During this process, the names of the participants were anonymised to secure their privacy. Subsequently, the second step of the analysis was coding these transcripts. For this, qualitative analysis software Atlas.ti was used. Passages relevant for answering the research question and subquestions were coded. These codes were developed during analysis of the transcript, and concerned topics and themes that were mentioned by the participants. This coding method in which codes are directly derived from data is called inductive coding (Hennink et al., 2020). The codes were compiled in a codebook (table 3, Appendix III). One codebook was used to code all four participant groups: local government, citizens, experts and youngsters. Subsequently, the intercoder reliability, Cohen's kappa, was calculated in order to evaluate the level of agreement between two coders on how to code the same content (Lavrakas, 2008). Hence, an independent second coder without in-depth knowledge of this research was asked to code 10% of the focus group transcripts. This fragment was representative of the complete set of transcripts, including conversations covering all of the four variables. A Cohen's Kappa of 0 indicates random agreement, determined by chance, whereas a Cohen's Kappa of 1 demonstrates a complete agreement between two raters. For this research, Cohen's Kappa was calculated for each of the five code groups. One round of coding with a second coder was required for this study. That is, a substantial agreement was shown for the codes covering digital collaboration, trust, and mentality (respectively κ=0.68, κ=0.75, κ=0.67). Furthermore, moderate agreement was found for the codes covering environmental concern and local government - citizen relationship (respectively κ=0.54 and κ=0.60).

Table 3.

Codebook

Category	Code	Cohen's Kappa
Digital collaboration	Higher meeting attendance	0.68
	Preference for combining digital and physical meetings	0.68
	Digital is not sufficient	0.68
	Lower threshold to participate	0.68
	More digital participation	0.68
	Reaching a different audience	0.68
Trust	Importance of transparency	0.75
	Lack of equality	0.75
	Less trust	0.75
	More trust	0.75
	There is no connection between trust and COVID-19	0.75
Environmental concern	More environmental concern	0.54
	Not being able to retain the effect after COVID-19	0.54
	People come outside more	0.54
	Realisation dependence on nature	0.54
Mentality change	Wake-up call	0.67
	Community feeling	0.67
	Change in attitude can come after COVID-19	0.67
	Behaviour change as a result of COVID-19	0.67
Local government - citizen relation	Citizens taking own initiative	0.60
	Passive citizens	0.60
	Passive local government	0.60

4. Results

This section describes the outcomes of the nine focus groups and four interviews to eventually answer the research question "What opportunities does COVID-19 offer for the collaboration between local governments and citizens on realising successful REPs?".

4.1 Local government

The first four focus groups were conducted with local government officials. Overall, this group was moderately positive regarding the positive effects of COVID-19 on collaboration. Positive effects were especially noticeable regarding digital collaboration. Every participant agreed that there is more digital collaboration now than prior to COVID-19. Several advantages of digital collaboration came to light. First of all, most of the local government officials were pleasantly surprised about the positive effects of online meetings. They mentioned online meetings made it significantly easier to collect input. Several participants said that citizens tended to ask more questions during an online meeting than during its physical counterpart. Various participants from the local government thought this development was the result of the anonymity that comes with online meetings, making it easier to voice an opinion. Additionally, many local government officials saw a higher attendance to their participation meetings during the COVID-19 time than before, including young people and people that are busy. For example, respondent 4 said:

"I see that the threshold (to participate) is much lower and the variety of the target audience is much larger. The threshold is even lower for the target audience that does not even know how to use a computer mouse by manner of speaking."

However, the majority of the participants also emphasized the more difficult aspects of digital collaboration. Local government officials mentioned the absence of informal conversations, interaction that was highly valued by citizens. Moreover, these participants indicated they could not read others' body language or emotions, complicating collaboration. Furthermore, digital meetings impede 'real interaction', making collaboration more challenging as well. Hence, various participants suggested a mix of both physical and digital meetings, to benefit from incorporating both types of meetings. Respondent 7 remarked:

"The ideal situation would be a combination of the two. That you can collect a lot of information digitally, but still organise physical meetings to have a deeper discussion about a topic, where people get the opportunity to express their feelings."

Regarding the variable trust, participants were less positive in general. Several participants did not see an influence of COVID-19 on trust levels. However, various participants did think COVID-19 led to more trust in the local government. This is because of how local governments acted on COVID-19. Nonetheless, participants who did see a connection between COVID-19 and trust expressed their concern whether its effect would be permanent or fade over time.

The same sentiment came forward for the variable environmental concern. Overall, the majority of the officials did think that COVID-19 had an effect on environmental concern: people were more outside in nature, and COVID-19 could have functioned as an eye-opener. However, they worried

whether this attitude would endure after COVID-19. Lastly, some participants doubted whether citizens would be more concerned about the environment, not despite but because of COVID-19. They expected that citizens were too distracted by COVID-19 to focus on the energy transition.

The effects of COVID-19 on people's mentality was last to be discussed. Participants who were positive regarding a change in mentality, indicated that this has been ignited by a wake-up call. These participants did often make the side note that they were unsure whether this would be sufficient to retain the change in mentality. However, a large part of this group was reluctant regarding the effect of COVID-19 in people's mentality. They thought COVID-19 did not have enough impact to affect those who were unwilling to participate in and collaborate on REPs in the first place.

4.2 Citizens

The citizens that participated were in general unsatisfied about the relationship with their municipality. This sentiment shaped their opinions concerning the effects of COVID-19 on digital collaboration, trust, environmental concern and mentality change.

The citizens talked about both the advantages and disadvantages of digital collaboration. A lower threshold was one of the most frequently remarked benefits of digital collaboration. For example, citizens did not have to travel to meetings. Meetings were much more efficient as well. Nonetheless, the majority of the participants accentuated the disadvantages of digital participation and collaboration. Meeting online has various shortcomings in their opinion. It hampers the ability to read others' non verbal cues, and the option to have informal conversations with municipality officials or other citizens. In addition, several citizens noted that they thought they could not fully express themselves. For instance, because they could only respond via chat instead of starting a conversation. This enforced an already existing feeling of inequality. For instance, respondent 18's response to these matters was:

"I completely agree with the previous speakers: the non-verbal communication, the emotion that occurs in meetings, cannot be read when you sit behind a screen. You are inhibited in your response, because it is more difficult to communicate this way. We are not used to it. I highly doubt whether digital communication is the best way."

Furthermore, some citizens mentioned that digital meetings are not accessible for everyone. They think that a group of citizens who are not technical minded is left out. In general, most of the citizens came to the conclusion that a combination of both physical and online meetings would be desirable.

The majority of the participants were critical and sceptical about the relationship between COVID-19 and trust. They expressed doubt regarding the correlation between COVID-19 and trust. The participants who did think there was a relationship, stated that their trust had decreased, partly due to the passive behaviour and performance of the municipality during the pandemic. The vast majority of this respondent group felt a lack of equality in the relationship between the two parties. This feeling of inequality corresponds with participants' feeling of not being taken seriously. In that same manner, the topic of transparency frequently came up. Citizens missed openness. Respondent 19 said:

"The municipality needs to be able to show that they put effort in involving citizens. In my opinion it was never their intention to actually let citizens have an equal say. For instance, in the development of the Transition Vision Heat, citizens were completely left out".

In regard to environmental concern increasing as a result of COVID-19, a small group reacted with a careful 'yes', despite being sceptical as well. The majority of the citizens described how they and their neighbours go outside more and spend more time in nature. This sparked a new realisation about people's dependence on nature. Nonetheless, these participants repeatedly emphasized their scepticism regarding the persistence of the current environmental concern and whether it could eventually lead to better collaboration between local governments and citizens.

The same sentiment came forward for the last variable that was discussed during the citizen focus groups. Some of the participants did notice more solidarity and a higher community feeling, however, they were uncertain about the persistence of this effect.

4.3 Young citizens

Younger citizens who were engaged in the energy transition and REPs indicated to be more positive about the current way of communicating. In their opinion, digital collaboration is more efficient, and lowers the threshold for youngsters to participate. They mentioned that youngsters prefer digital collaboration, making it easier to join a meeting. Additionally, youngsters do not experience any troubles in using digital tools. Nevertheless, the young citizens recognized the shortcomings of digital collaboration, emphasizing the inability to have deeper conversations. Therefore, they thought that digital meetings could not be a complete substitute for physical meetings. However, the young citizens did note that digital meetings could form an entry for youngsters to participate in physical meetings and collaboration later on. Respondent 37 explained:

"You can find youngsters online, it is their habitat. They don't have to leave their living room. I think it (digital meetings as an entry) would be the best flight path to involve young citizens. I think that it makes it easier for youngsters to be more involved with municipality matters."

The youngsters did not perceive a direct connection between COVID-19, trust, and more willingness to collaborate accordingly. They explained that their trust in the national government affected their trust in local governments. Their level of trust in the national government had decreased in the past months, which affected their trust in the local governments as well.

According to the youngsters, COVID-19 did lead to more environmental concern, at least in their own social environment. They did think COVID-19 was a wake-up call for people, an eye opener to better comprehend the influence people have on the environment. Youngsters did alter their behaviour accordingly, searching for ways to take better care of the environment as individualists. This, however, did not provoke more willingness to collaborate more with local governments. Respondent 37, for instance, noted:

"I don't search at the government for the solution, but rather by myself, how much plastic I use for instance."

The youngsters reacted quite optimistic regarding COVID-19 inducing mentality change. They strongly believed people adjusted their behaviour. Similarly, they perceived more community feeling. Nevertheless, they expressed their fear whether this change would last.

Lastly, youngsters made several suggestions for involving younger citizens in participation and collaboration. They highlighted the importance of the right approach. Framing was named to be highly important, as well as who approached youngsters. Youngsters involving youngsters was more effective than when municipalities reached out.

4.4 Experts

Experts were asked to respond to the outcomes of the focus groups with local government officials and citizens. All the experts did recognize the issues that were named by the local government and citizen focus groups. However, this group of participants was more positive regarding the opportunities presented by COVID-19. Overall, they reported a higher attendance to renewable energy participation meetings. They thought this was the result of a lowered threshold to participate and the anonymity provided by this online format. The experts believed that online meetings are inclusive, and accessible for every age group. Moreover, one expert pointed out that these types of meetings even provide more balanced discussions, as conversations cannot be 'hijacked' by loud citizens with a very strong opinion. Online meetings give more reserved citizens the opportunity to share their opinion too. Accordingly, the majority of the experts did not agree with citizens' commentary concerning their say during meetings. Experts believed that citizens still have an equal say, however, the experts could imagine that citizens saw this differently. In addition, they did acknowledge that the possibility to work towards deep interaction is impeded by this digital format. Nonetheless, through COVID-19 local governments discovered new communication methods that otherwise would not have been investigated. The experts advocated a mix of mediums, adjusted to the target audience. Respondent 34 said:

"When everything is back to normal, it would be a waste if we do not use our new experiences with digital options. It would be nice to still use this, besides (physical) meetings."

The importance of expectation management was named as an important factor influencing the level of trust. Citizens should be engaged earlier on in the process, which will help in building a warmer relationship. Nonetheless, experts were not sure whether COVID-19 could impact this relation.

Additionally, a connection was seen between COVID-19 and environmental concern. The experts noted that people surround themselves more with nature, and prefer to be in nature, feeling a connection with their environment. Nevertheless, it is difficult to maintain this effect. In addition, in order to fully benefit from the current circumstances, it is their, but also local governments' job to make the connection between environmental concern and collaboration on REPs visible.

The same applied for mentality change. Experts did recognize more community feeling. People investing in their neighbourhood and joining energy cooperatives were named as examples. Respondent 35 explained:

"People are more dependent on their own municipality and environment, creating a stronger connection between people. This created a new way of collaboration, and we should contain this.

Together we should incite new initiatives and developments. I can imagine COVID-19 can contribute to this."

Lastly, experts criticized the communication skills of local governments in general, and think there is much work to do in improving this.

4.5 Overview of the results

The variable digital collaboration turned out to be the most discussed and disputed factor. Local government officials were pleasantly surprised by the advantages that came with digital collaboration, including its lowered threshold, anonymity and efficiency. Citizens, on the other hand, were more focussed on the disadvantages, for instance not being able to express their feelings, read others' non-verbal cues or have informal conversations. Furthermore, this was the only group who thought that some citizen groups are left out in a digital medium. Experts thought that citizens' feeling of not having a fair say in digital meetings is not completely legitimate, stating that these limitations existed for a great deal only in their heads. Just like local government officials, experts were quite positive about the advantages of digital participation. Especially younger citizens were positive about digital collaboration, noting that it makes participating and getting involved very accessible.

Concerning the variable trust, local government officials, citizens, experts and young citizens were uncertain about the impact of COVID-19 on the level of trust in local governments, and collaborating on REPs accordingly. Young citizens did mention that their trust in local governments is highly influenced by their trust in the national government. This trust level was rather low when the focus group was conducted, as this group of citizens felt they were hit the hardest by the COVID-19 measures. In addition, local government officials, citizens and experts repeatedly emphasized the importance of transparency. In the focus groups, local government officials indicated that their reaction and actions were of the utmost importance to establish trust with citizens. Personally, they thought they had reacted quite adequately to the COVID-19 pandemic. However, citizens thought differently: they were unsatisfied with local governments' response. This affected their trust in the local government. Experts thought that expectation management influenced citizens' level of trust as well. Citizens need to know where they stand, what they can expect and what is expected from them as well, to prevent frustration. For instance, information meetings cannot be presented as collaboration meetings in which citizens can deliver input. Besides expectation management, experts highlighted the importance of engaging citizens already in the early stages of a project, to promote a warm relationship between local governments and citizens.

Almost all of the participant groups were quite reluctant regarding the effect of COVID-19 on environmental concern, despite observing positive effects as well. The four participant groups all noted that people were outside more and even became more aware of the effects of COVID-19 on the environment. For instance, experts did see that people felt more connected with nature. Nevertheless, local governments, citizens, and experts were hesitant whether these effects could be maintained after the pandemic. Likewise, they were all under the impression it would not make a difference concerning the collaboration between local governments and citizens. Young citizens were more optimistic than the other groups. Regardless, young citizens would rather change their own behaviour than reach out to local governments for more collaboration. Citizens also thought that if

there was more environmental concern, it would not necessarily lead to more or better collaboration.

The opinions and experiences regarding mentality change were rather similar to the ideas on environmental concern. That is, the local government group, citizen group and experts were all uncertain whether COVID-19 led to mentality change. Citizens doubted whether COVID-19 resulted in more solidarity, feeling of togetherness, and accordingly more community feeling. Regardless, a minority of the citizen group were more optimistic, observing more community feeling. They hope that a bigger change in mentality would come after COVID-19. Similarly, young citizens had a more positive perspective on the relationship between COVID-19 and mentality change. They also mentioned increased community feeling in their social climate. However, youngsters expressed their concern regarding the durability of the current dynamic.

5. Conclusion

The first sub-question of this research was: "What are the positive and negative impacts of COVID-19 in relation to citizen participation?". COVID-19 had several positive impacts in relation to citizen participation. Digital platforms enabled a new approach for involving and connecting with citizens. Digital meetings are convenient for most people: they do not have to travel somewhere, their input remains anonymous, and meetings are more efficient. This lowers the threshold to participate and become engaged in the energy transition in their region. Furthermore, the forced transition to using digital media stimulated a more creative use of the existing methods for engaging citizens, creating a more diverse method mix. Although this research took a positive approach, it found that COVID-19 had several negative effects on the relation between local governments and citizens as well, or no effect could be seen at all. COVID-19 could take the attention away from collaboration on REPs instead of highlighting its importance, or make citizens frustrated about the way local governments handle participation issues in times of the pandemic. For instance, digital meetings often contain one-way communication only, leading to frustration in the citizen group and preventing growth of goodwill. Moreover, the effects of trust, environmental concern and mentality change were quite imperceptible. This does not directly mean there are no effects, rather it shows that change will not gradually arise by itself. More active effort is needed to be able to possibly benefit from the current dynamic.

The second sub-question focussed on the extent to which these positive effects could contribute to a better collaboration between local governments and citizens. Citizens' resistance and frustration seems to be deeply rooted, possibly too deep for COVID-19 to make a difference. Furthermore, as the connection between COVID-19 and trust, environmental concern and mentality change was often not seen, the possible effects of COVID-19 on collaboration are minimal. Regardless of these outcomes, COVID-19 did lead to new insights, for instance concerning the frustrations and concerns of citizens. More transparency can abate these feelings, improving the relationship and thereby willingness to collaborate. Additionally, experts highlighted that local governments should have more frequent contact moments with citizens, to keep them informed and involved. Digital means can facilitate this more easily. Therefore, to optimally benefit from digital media, it should not be a replacement for physical meetings, but rather an extension. All the different participants of the focus groups preferred this combination of digital and physical meetings. All in all, COVID-19 certainly brought various advantages to the collaboration between local governments and citizens on REPs.

However, the best modus is yet to be found. These new perceptions can be a first step towards working on these issues. Local governments can, with the help of experts, use these insights to change awareness into actual action.

Lastly, this research tried to find out to what extent this improved collaboration could advance the successful realisation of REPs. However, as collaboration did not significantly improve as a result of the impacts of COVID-19, it is difficult to assess to what extent improved collaboration advanced successful realisation of REPs. Hence, how improved collaboration can help in successfully realising REPs remains guesswork. Altogether, the outcomes of this study are less positive than hypothesized. The main research question of this research was: "What opportunities does COVID-19 offer for the collaboration between local governments and citizens on realising successful REPs?". COVID-19 can provide opportunities for collaboration between local governments and citizens on successfully realising REPs, however, finding out how to optimally make use of these opportunities remains a challenge.

6. Discussion

6.1 Theoretical implications

This research is based on theory and literature findings. However, the research findings do not completely align with those of other scholars. Some findings support, while others contradict or bring new light to previous research. Various researchers described the advantages of digital participation, such as digital tools providing easier access to citizens (Yang, 2019). Furthermore, digital platforms facilitate governments to reach a wider audience (Milakovich, 2010). Participants of this study saw these advantages of digital collaboration as well. They mentioned the lower threshold to participate and the presence of citizens who usually do not attend physical meetings. Additionally, the outcomes demonstrated how citizen anonymity could lower the threshold to participate in an activity organised by a local government, as was stated i.a. by Milakovich (2010) and Froonjian and Garnett (2013). Nonetheless, the literature deemed the effects of digital collaboration to be more positive than was found in this research. The forced shift to an online environment did not automatically lead to more acceptance, as was described by Razif et al. (2020) and Labosier (2020). Participants had a less positive attitude towards virtual collaboration than was described by Razif et al. (2020) and Labosier (2020). Participants could have been less inclined to change their attitude as their frustrations root deeper than their willingness to change.

Furthermore, an increase in trust in the government, induced by COVID-19, was expected. This expectation was based on pollings and ratings. Nonetheless, participants in this study did not perceive a connection between COVID-19 and trust. They sometimes even indicated that COVID-19 led to less trust in their local government. This debunks the notion that signs of increased trust in the national government could lead to more trust in local governments, eventually improving collaboration.

Moreover, environmental concern was associated with higher willingness to participate in community energy systems (Kalkbrenner & Roosen, 2018; Prasad Koirala et al., 2018). Hence, it is an important factor for behaviour change. COVID-19 was expected to provoke environmental concern, leading to more sustainable behaviour and higher willingness to participate (Rousseau & Deschacht,

2020). However, participants did not perceive the effects of environmental concern on collaboration to the same extent as was described in literature. They thought that the impact of COVID-19 was limited, certainly not enough to induce behaviour change amongst citizens.

Lastly, literature findings showed that solidarity and community base play an important role in smoothing the collaboration between local governments and citizens (Williams, 2009). COVID-19 was explained as a catalyst of solidarity, eventually leading to better collaboration (Kalse, 2020). However, the findings of this study did not show this relationship. Participants did not think COVID-19 could lead to a real change in mentality. They did not detect higher levels of solidarity in their environment, nor did they mention an increase in community feeling.

In general, amongst the four variables, digital collaboration turned out to be most impactful. Participants identified the same benefits of digital collaboration as were presented in literature. In addition, they thought COVID-19 had the most impact in the field of digital collaboration, especially compared to the three other variables.

6.2 Practical implications

The outcomes of this research have implications for local government officials as well as experts active in the field of the Dutch energy transition. The findings show citizens' high levels of frustration and dissatisfaction with local governments. This is the result of insufficient transparency and expectation management leading to misalignment. These negative experiences might have influenced the collaboration between local governments and citizens, which can lead to missed opportunities for the energy transition. Hence, it is recommended that local governments take the criticism expressed by those involved into account during their efforts to further the Dutch energy transition.

Additionally, the research findings imply a lack of visible connection between COVID-19 and collaboration on REPs. Nevertheless, it is recommended that local governments take this possible connection into account when trying to improve their relationship with citizens. Particularly as various participants did allude to the relationship between the researched variables and collaboration. Therefore, it is recommended that experts focus on this connection, working towards more awareness for both local governments as well as citizens. Making this connection evident can help in foregrounding the positive side effects of COVID-19

Accordingly, forced online meetings have implications for collaboration between local governments and citizens. The results highlighted both the benefits and downsides of this new communication method. It is recommended that local governments focus on the benefits of digital collaboration, and try to diminish its negative sides. Digital meetings lower the threshold to become involved. This type of communication is especially beneficial for engaging younger citizens, and can thereby be very valuable. Involvement of a broader scope of citizens can better represent their needs and concerns, which is important for smoothing the collaboration.

6.3 Limitations

Limitations affect the outcomes and interpretation of this research. Various limitations are derived from methodological problems. First of all, organising focus groups turned out to be more difficult than expected. Participants could often only be contacted via email, meaning it took more time to

receive a response. The citizen group was especially difficult to approach, as the researcher could not directly contact these people due to GDPR complications. Furthermore, the researcher did not always receive a reply from participants. In addition, finding a suitable moment for a focus group where everyone was available was difficult. Similarly, some participants cancelled at the last minute. Consequently, some focus groups were smaller than anticipated, meaning less input could be collected. This smaller sample size might have influenced the outcomes of the study, as well as its validity. In addition, only citizens who were already interested and involved in the energy transition responded to the call for participation. Citizens in particular tended to have a negative attitude. Because of the group dynamic that is typical for a focus group, this negativity could be enforced. Participants with a negative attitude sparked negativity in other participants, overstating their original stance. This possibly influenced the outcomes of this study.

Secondly, data was collected in January and February, meaning it is a snapshot of the opinions, thoughts and experiences of this time period. Conducting focus groups in another time period could have led to different outcomes. For instance, local government officials and citizens reported they were more optimistic regarding the impact of COVID-19 in the beginning of the pandemic than during the winter months. Thus, the outcomes of this research could have been influenced by the time of data collection.

Lastly, the online setting of the focus group might have constrained the discussion flow. Participants found it difficult to respond to each other and start a discussion in this online setting. This might have been different in a physical setting. Hence, the advantages of the focus group method could not be fully exploited.

6.4 Further research

Certain research findings and limitations suggest the need for further research. First of all, research with a larger and more diverse sample is recommended. As described in the limitations of this research, this study foremostly included participants who were already involved in the energy transition and who had a strong negative opinion as well. A more diversified sample can provide different outcomes that might be more positive regarding the effects of COVID-19 on collaboration. Furthermore, a larger sample provides a more representative image of the complete population. In addition, the main disadvantage of qualitative data collection is that findings cannot be extended to the wider population with the same level of certainty as quantitative data. Hence, research complemented with a quantitative method such as questionnaires might discover the statistical significance of the outcomes of this study.

Secondly, this study touched upon the opinions and experiences of younger citizens. However, conversations with this citizen group were held quite late in the research process, and were not extensively elaborated on. It did become clear that youngsters' opinions were different from those of other, older citizens. Youngsters appeared to have a more positive perspective on the matter, making it a refreshing counterpart for the negative view of other citizens. Additionally, the energy transition concerns the future of the younger generation, making their involvement important. Therefore, further research into their opinions as well as how to involve this citizen group is suggested.

Thirdly, various participants emphasized that they did notice an effect of COVID-19 on various factors important for collaboration. However, they feared for the constancy of these effects. To optimally benefit from the effects of COVID-19, it is important to investigate ways to maintain this effect.

Lastly, the last sub-question of this research remains unanswered. This research did not prove whether collaboration improved due to COVID-19 effect, as findings did not significantly show positive effects of the four variables on collaboration. For that reason, further research on the effects of improved collaboration on successfully realising REPs is advised. For instance by investigating other variables besides digital collaboration, trust, environmental concern and mentality change. This knowledge can contribute to accelerating the Dutch energy transition.

6.5 Conclusion

In conclusion, this research looked into the potential positive impact of COVID-19 on collaboration between local governments and citizens on successfully realising REPs in the Netherlands. Thereby the variables digital collaboration, trust, environmental concern and mentality change were further investigated. This research found the impact of COVID-19 to be limited. However, the pandemic did change the way local governments and citizens collaborate. People's mindset has been impacted to some degree as well. How to optimally benefit from this momentum should be further examined. This research can be the initial impetus for further research into the positive effects of COVID-19 on the Dutch energy transition.

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Appendices

Appendix I: List of respondents

Respondent	Group	Municipality/company/organisation	Role (if applicable)
R1	Local government	Municipality Hoorn	Program manager
R2	Local government	Municipality Hoorn	Program leader Circular
R3	Local government	Municipality Hoorn	Sustainability consultant
R4	Local government	Municipality Hoorn	Project leader
R5	Local government	Municipalities Vught, Boxtel, Sint-Michielsgestel	Consultant environmental law, policy official
R6	Local government	Municipalities Vught, Boxtel, Sint-Michielsgestel	Communication consultant
R7	Local government	Municipalities Vught, Boxtel, Sint-Michielsgestel	Sustainability consultant
R8	Local government	Municipalities Vught, Boxtel, Sint-Michielsgestel	Communication consultant
R9	Local government	Municipality Hoeksche Waard	Sustainability consultant, project leader
R10	Local government	Municipality Hoeksche Waard	Sustainability consultant, project leader
R11	Local government	Municipality Medemblik	Heat director
R12	Local government	Municipality Medemblik	Communication consultant
R13	Local government	Municipality Medemblik	Core consultant
R14	Local government	Municipality Medemblik	Heat transition consultant
R15	Citizens	Municipality Den Bosch	-
R16	Citizens	Municipality Den Bosch	-
R17	Citizens	Municipality Den Bosch	-
R18	Citizens	Municipality Den Bosch	-
R19	Citizens	Municipality Hoorn	-
R20	Citizens	Municipality Hoorn	-

R21	Citizens	Municipality Hoorn	-
R22	Citizens	Municipality Hoorn	-
R23	Citizens	Municipalities Vught, Boxtel, Sint-Michielsgestel	-
R24	Citizens	Municipalities Vught, Boxtel, Sint-Michielsgestel	-
R25	Citizens	Municipalities Vught, Boxtel, Sint-Michielsgestel	-
R26	Citizens	Municipalities Vught, Boxtel, Sint-Michielsgestel	-
R27	Citizens	Municipalities Vught, Boxtel, Sint-Michielsgestel	-
R28	Citizens	Municipality Medemblik	-
R29	Citizens	Municipality Medemblik	-
R30	Citizens	Municipality Medemblik	-
R31	Citizens	Municipality Medemblik	-
R32	Citizens	Municipality Medemblik	-
R33	Expert	Over Morgen (Jos)	Consultant RES
R34	Expert	Over Morgen (Tabitha)	Participation consultant
R35	Expert	Over Morgen (Anouk)	Consultant Sun & Wind
R36	Expert	Over Morgen (Maureen)	Consultant RES
R37	Young citizens	JongRES (Dagmar)	Representative region Arnhem-Nijmegen
R38	Young citizens	JongRES (Ian)	Representative region Noord Holland Zuid

Appendix II: Interview guide

Wat we gaan doen:

- 5 onderdelen: eerst kort introductievragen, daarna stel ik vragen over de 4 factoren die ik heb onderzocht
- Deze factoren zijn van belang voor samenwerking tussen lokale overheid en burgers aan duurzame energieprojecten en kunnen naar mijn idee positief beïnvloed zijn door corona
- Deze factoren heb ik door middel van stellingen voorgelegd tijdens focusgroepen met gemeenten en inwoners, bijvoorbeeld de digitale samenwerking tijdens corona is beter dan voor corona
- De meest relevante resultaten van deze focusgroepen leg ik aan je voor. Herken je deze trend ook? Zie je dit terug? Hoe kunnen de twee partijen meer op één lijn kunnen komen?

Introductie

1. Wat is jouw rol bij duurzame energieprojecten?
2. Wat zijn jouw ervaringen met de samenwerking tussen lokale overheid (gemeenten) en inwoners? (Heb je een voorbeeld van deze samenwerking?)
3. Welke effecten van corona merk je in deze samenwerking?

Thema 1: digitale samenwerking

4. In de focusgroepen kwam naar voren dat digitale bijeenkomsten **laagdrempeliger** zijn en dat dit leidt tot een **grotere opkomst**. **Lokale overheden** gaven aan positief verbaasd te zijn over de **positieve uitwerking** van online bijeenkomsten en zeggen zo makkelijker input op te kunnen halen. **Burgers** geven echter aan dat ze het diepere contact en het **'gekeuvel'** missen.
5. Lokale overheden hebben het idee dat inwoners **makkelijker hun mening kunnen geven**, bijvoorbeeld omdat een berichtje in de chat laagdrempelig en anoniem is. Inwoners daarentegen hebben het idee dat ze hun verhaal niet kwijt kunnen en weinig inspraak hebben.
6. Inwoners hebben het idee dat er nu wellicht meer jonge en drukke mensen deelnemen aan bijeenkomsten, maar dat **ouderen nu achterblijven**. Lokale overheden zagen dit probleem minder.
7. Wat vind je van het idee om **hybride bijeenkomsten** te organiseren? Welke bijeenkomsten kunnen dan het beste digitaal en welke het beste fysiek georganiseerd worden?

Thema 2: vertrouwen

8.
9. Uit de focusgroepen bleek dat participanten niet per sé meer of minder vertrouwen hebben in de lokale overheid.
10. Transparantie werd ook vaak genoemd als een belangrijke factor. Enkele lokale overheden vonden zichzelf transparanter, bijvoorbeeld omdat bijeenkomsten opgenomen en teruggekeken konden worden. Inwoners vinden juist dat er nog steeds een gebrek aan transparantie is.

Thema 3: milieubezorgdheid

11. Uit de focusgroepen bleek dat zowel lokale overheden en inwoners wel de link legden tussen corona en meer milieubezorgdheid, maar dat zij zich afvroegen of deze effecten blijvend zijn.

Thema 4: mentaliteitsverandering

12. Uit de focusgroepen bleek dat zowel lokale overheden als inwoners dachten een mentaliteitsverandering te zien in hun omgeving, maar denken dat dit effect niet blijvend is, of tot betere samenwerking leidt.
13. Wat zorgt in jouw ogen voor betere samenwerking tussen LG en C?

Appendix III: Codebook

Category	Codes	Description	Example
Digital collaboration	Higher meeting attendance	Digital meetings, that are forced by COVID-19, are generally attended by more people than their physical counterpart	Gisteren hadden we nog een zonnepanelenactie [...] dus in die zin is dat alleen maar goed dat je juist een breder publiek trekt en kun je meer mensen informeren
	Preference for combining digital and physical meetings	Participants of the focus groups indicate that a combination of both digital and physical meetings is most suitable and will lead to the best collaboration	Ja, in principe bij fysieke bijeenkomsten voer je met mensen die blijven hangen nog individuele gesprekken. Dat mis je nu wel, dat je niet nog even een nadere toelichting kan geven. Dan zou ik moeten combineren inderdaad denk ik ja.
	Digital is not sufficient	Participants indicate that digital meetings do not meet their needs when collaborating. The level of interaction and ability to read emotions and body language are not satisfactory	En inderdaad, dat je er wel oog voor moeten hebben dat je dus ook met bepaalde groeperingen of bepaalde maatschappelijke organisaties wel echt het face to face gesprek houdt. Want dat mis je inderdaad wel: het stukje netwerken, napraten.
	Lower threshold to participate	Digital meetings are easier to join, as they require less effort. This lowers the threshold to get involved	Je brengt ook inwoners een stuk gemak met zich mee. We vragen natuurlijk echt wel veel van onze inwoners. En je biedt ze nu ook de mogelijkheid om zonder reistijd en zonder gedoe toch mee te kunnen doen of te luisteren.
	More digital participation	All the advantages of digital mediums lead to more participation	Als je ziet hoeveel vragen je in de chat krijgt. Normaal krijg je nooit zoveel vragen op een avond.
	Reaching a different audience	Through the use of a digital medium for meetings, a different audience is reached, transcending the usual audience	Er wordt nu natuurlijk meer digitaal gedaan, waardoor je ook weer een ander publiek bereikt.
Trust	Importance of transparency	Participants indicating the importance of transparency influencing their level of trust	Er komt geen reactie op eerdere gedane toezeggingen om meer openheid te geven en meer belang te hechten aan die ideeën vanuit de bewoners.
	Lack of equality	Participants indicating that there is a lack of equality between local governments and citizens, which influences the level of trust	Maar het is meer van, het wordt ons voorgeschoteld en we kunnen misschien wel reageren. Alleen in de chat, want zoals wij dat nu mondeling doen, kan dat niet eens.Dat er iets mee gedaan wordt, die indruk heb ik niet.
	Less trust	COVID-19 lead to less trust in local governments	Daar heb ik geen vertrouwen gekregen. Minder vertrouwen zelfs.
	More trust	COVID-19 lead to more trust in local governments	Ja, nou, aan de ene kant denk ik dat we ook dus het vertrouwen misschien wel weer meer krijgen, omdat mensen meer kans hebben om vragen te stellen en dat we die netjes beantwoorden.
	There is no connection between trust and covid-19	Participants think that COVID-19 did not affect trust levels.	...en ik snap de stelling ook wel als het gaat over hoe is je vertrouwen nou toegenomen of afgenomen door corona. En ik denk dat dat vertrouwen helemaal niets hiermee te maken heeft.
Environmental concern	More environmental concern	COVID-19 led to more environmental concern amongst citizens.	Ik heb ook de indruk dat positief uitwerkt in die richting, eigenlijk meer bezorgdheid over gezondheid en over lange termijn voor onze kinderen.

	Not being able to retain the effect after COVID-19	The effects of COVID-19 on people's environmental concern will decrease over time after the COVID-19 pandemic has passed, meaning there is no long-term effect	Ik heb wel het gevoel dat het ook alweer een beetje aan het wegebben is, dat de ik-cultuur weer de overhand neemt en dat.
	People being too distracted because of COVID-19	People are too distracted by COVID-19, for instance because of its high impact on their personal life, that they have no regard for the effect of COVID-19 on the environment.	En ik denk dat gedurende de corona... Ja, wij als burgers misschien toch wat meer afgeleid zijn van dat thema.
	People come outside more	Because of COVID-19, people come outside more, which can lead to more appreciation for the environment	Dus ik zie wel meer mensen die enthousiast geworden zijn en misschien omdat ze meer thuis zitten, meer te doen willen hebben, en dan buiten gaan lopen met een grijper en ook de kinderen meenemen
	Realisation dependence on nature	Because people are outside more, they realise how dependent they are on nature and how they can affect nature with their behaviour	Er is een gevoeligheid gekomen voor de kwaliteit van het leven, zo wil ik het wel uitdrukken. Die is wel gegroeid.
Mentality change	Wake-up call	COVID-19 functioned as a wake-up call for people, causing people to reflect on themselves and their behaviour	En in die zin was dat echt een eye opener, denk ik, waarbij mensen ja eigenlijk aan de ene kant geïnspireerd worden van 'goh, we hebben toch heel veel meer zelf in de hand met zn allen dan we beseffen misschien wel.
	Community feeling	People are in the same boat, are more dependent on each other, leading to a higher community feeling	Ik denk dat de mensen wel wat saamhoriger zijn, althans een gedeelte van de bevolking
	Change in attitude can come after COVID-19	Participants think that the effect of COVID-19 op people's mentality will come later	Ik weet niet hoe het al eens gemeten is ergens, maar je kunt je voorstellen dat het nog een aantal jaren gaat doorwerken.
	Behaviour change as a result of COVID-19	COVID-19 led to a change in mentality, which resulted in behaviour change	...En nu geconfronteerd worden met zo virus. Er zullen een groot aantal mensen zijn die bewuster gaan leven.
Local government -citizen relation	Citizens taking own initiative	Participants who were unsatisfied with the behaviour and actions of the local governments took their own initiative to 'do something'	Dus wij gaan nu zelf maar dingen organiseren ook online vanwege de coronatoestanden. Wij gaan nu de mensen zelf op de hoogte brengen daarover.
	Passive citizens	Participants pointed out the passive behaviour of citizens regarding the collaboration on REPs	Van de andere kant moet ik toegeven dat het ook afhangen, denk ik, van gewoon de burger zelf, of die als het ware dat probleem, die bewustwording ook zelf op wil pakken. En ik denk dat gedurende de corona... Ja, wij als burgers misschien toch wat meer afgeleid zijn van dat thema
	Passive local government	Participants pointed out the passive behaviour of their local government regarding the collaboration with citizens on REPs	Maar eh ja, die plannen waren leuk, maar daar is eigenlijk ja, bij de gemeente is dat niet opgepakt.