RESPONSIBILITY AS OPPORTUNITY:

KEEPING SUSTAINABLE DEVELOPMENT ECOSYSTEMS RELEVANT FOR PUBLIC-PRIVATE PARTNERS

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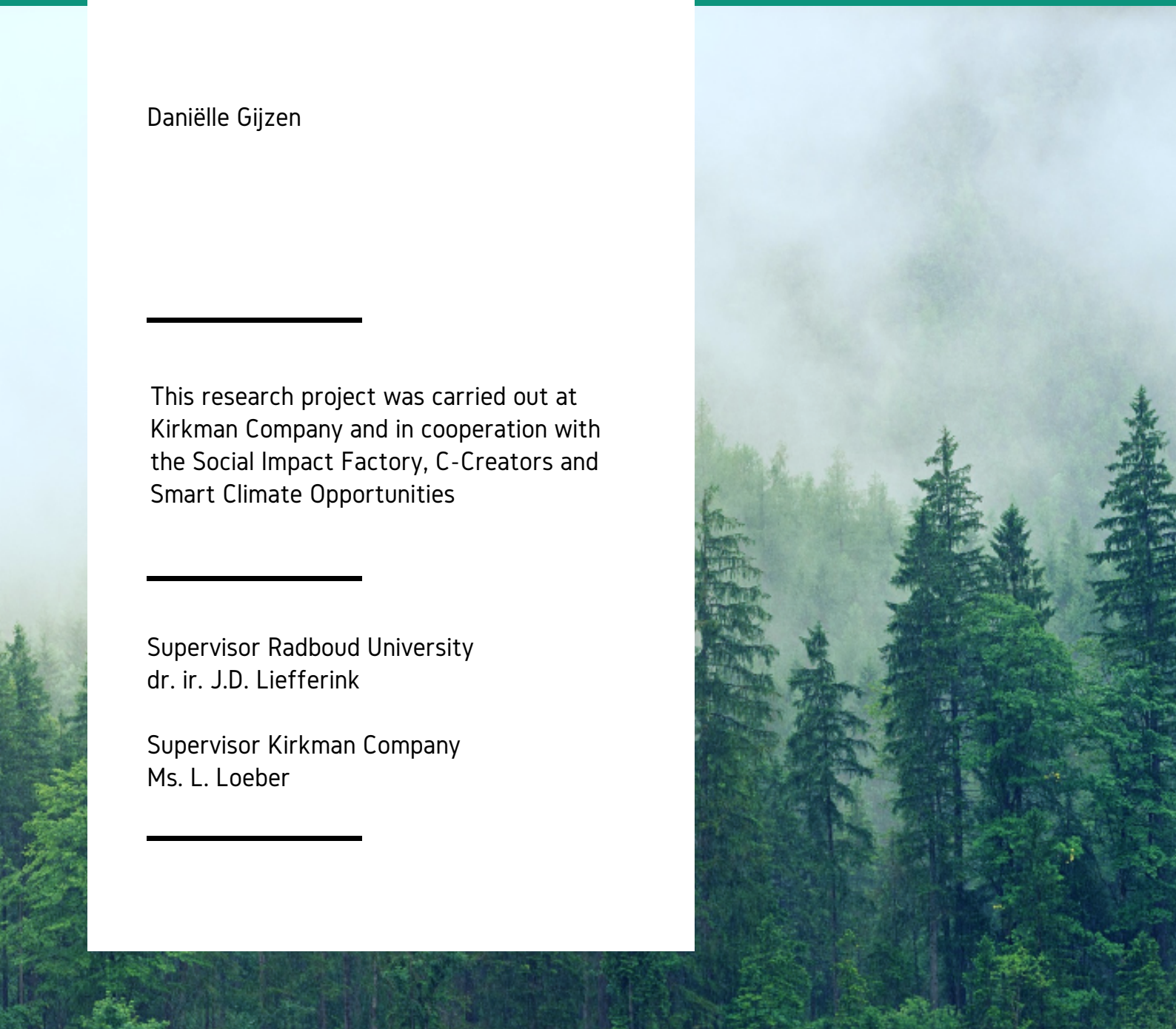

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Executive summary

This research explores how collaborations towards sustainable development remain relevant for public and private partners. To do so, the research looks at three different cases of public-private ecosystems (PPE) – networks of public and private partners, organized around a central foundation, hoping to address a specific sustainable development issue (social entrepreneurship, circular construction and innovations for energy transition). These three cases are the Social Impact Factory in Utrecht, C-Creators in Hoofddorp and Smart Climate Opportunities in Heerlen.

A literature review shows the importance of working cross-sector on sustainability issues. Theories of both Marsh and Rhodes on policy networks, and Huxham and colleagues on collaborative advantages and inertia will be combined and operationalized to fit the PPE context.

Through in-depth, semi-structured interviews with partners of the three PPEs, and assessing relevant documents, this research aims to gain insight in how different constellations of actors – through a designed network structure – relate to each other through interdependencies. Secondly, it aims to explore how this structure, through interdependencies, influences perceived collaborative advantages and collaborative inertia, and third, it hopes to assess how actors construct their reasons to stay engaged with the PPE.

The results show that the PPEs current network structure does not create any vertical interdependencies. However, the foundation does provide access to valuable resources to partners, many of whom directly or indirectly strengthen partners. What resources that are exactly differs per case, usually a mix of resources such as network or brokerage resources, knowledge and expertise, visibility, and legitimacy. Another important resource found is innovative learning and exploration.

Access to these resources means a blossoming in different goals (individual, organizational, collective) a partnership *could* address. A common factor is that in this early partnership phase, it is relatively easy to unite under a shared purpose, and those working towards this purpose tend to be highly motivated individually. However, it is hard to justify what exactly it contributes to organizational goals, especially to make this measurable – interviewees say it *could* work, but they are not sure whether (or how much) it is happening. It could be frowned upon to prioritize organizational returns, however, if the individual and collective goals are agreed upon, why would you not try to improve the collaboration outcomes further.

This way, insights into collaborative advantage opportunities and collaborative inertia pitfalls could in fact be influenced by network structure – by assessing resources present and what else could be pursued with them. It could also work the other way around, where analysis of both collaborative advantage and collaborative inertia shines a new light on this idea in relation to network structure. Letting available means (resource dependencies in network structure) inform possible organizational collaborative advantages - in this way, it is exactly the multi-faceted nature of the goal interdependency that can enhance the relevance of the partnership.

In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed.
- Charles Darwin

Chapter 1: Introduction

Modernity has brought us many things – whether it is the efficient growing of food crops, effective healthcare, or increased access to information. It has enabled growth and prosperity worldwide. However, with new solutions come new problems. Our economic system has proven to be detrimental to our natural environment. It causes pollution of air, soil and water, both by unnatural substances such as plastics or nuclear wastes, as well as by increased quantities of natural substances, such as CO_2 in the atmosphere, or nitrogen and phosphorus in water. It is changing our climate. It is depleting natural resources at a non-renewable rate. It is causing a loss of biodiversity disruptive to fragile natural ecosystems (see e.g. Röckstrom et al., 2009).

No one *owns* this problem, nor does any one organization own the solution to it. It threatens all, but no one can address it by themselves. Not even governments, who have may have the mandate of public interest behind them, but not the means or power to change a global economic system. Faced with austere budgets and growing responsibility, governmental bodies try to find other actors that can help them tackle complex and ambiguous challenges, such as the environmental crisis. This can be placed in a larger global shift towards the collaborative 'governance' over strictly enforcing 'government'. A key component is placing responsibility onto market parties, though responsibility is in this case not *shifted* to a private partner – as for example when privatizing railroads – but rather *shared* (Warner, 2003). People and organizations across supply chains, sectors and social spheres have begun working together towards solutions, but the process is long and difficult. In such collaboration, no one bears the explicit responsibility, and so keeping parties together through a trial-and-error phase can be challenging.

What if we could use this shared responsibility as an opportunity for different actors? When staying connected to other organizations makes them more agile, more resilient, than they would be on their own, this makes the collaboration continually relevant for them. This research uses the concept of collaborative advantage to better understand how a partnership can remain valuable for individual

partners. This concept refers to any perceived synergies in the collaboration, meaning any outcome that is better than partners would have gotten without each other (Huxham & Vangen, 2013).

1.1 Problem Statement

Partners in public-private partnerships should aim to find these collaborative advantages, so that their own benefits out of the collaboration would simultaneously safeguard continuation of the shared societal purpose. However, as with any social structure in a pioneering phase, it is unclear *how* such fundamentally different organizations can work together in creating mutual collaborative advantages. A majority of these cooperation initiatives appear to remain 'stuck' in their first phase, with relatively low sophistication of cooperation and limited activities, and/or appear to suffer from 'collaborative inertia' (Hamilton & Holcomb, 2013; Huxham & Vangen, 2000). Collaborative inertia is a term describing the opposite of collaborative advantage. Instead of advantages, parties can find a process that is slow, painful and ultimately not very effective (Huxham & Vangen, 2000). In general, collaborations perceived to be successful by partners, are expected to be continued longer than those perceived not to be fulfilling their promise (Porter, 1989). The involved parties then have to make the decision that the benefits do not outweigh the costs, long before it is actually gaining traction and making a meaningful impact.

This research is carried out at a Dutch consultancy, Kirkman Company (KC), which sets up and participates in 'public-private ecosystems' (PPEs). These public-private ecosystems (PPEs) are networks of actors interested in addressing a certain societal challenge, mostly started by a handful of important stakeholders – see the sidebar on p. 9. The consultants voiced a concern about the many collaborations they see around them. After an initial impulse, progress sometimes slows, as inertia overshadows advantage, and the collaboration dies off before it can actually make an impact. They want to harness their own PPEs against this, and felt their framework for setting up these PPEs might miss insights in how to keep them relevant over time.

But this ultimately brings us back to the first problem, looming in the distance. Our natural environment is already in disarray, and continuing to take our time might mean risking more and more. If collaborations are the way forward, we must quickly find ways to structure a network that unleashes collaborative advantages and minimizes collaborative inertia. As Darwin put it: we must improvise and collaborate effectively.

1.2 Research aim and Research Questions

This research will explore three cases of public-private ecosystems in the Netherlands geared at addressing sustainable development issues. For a clear understanding of the research aim it is thus important to first understand what these PPEs entail. Interested parties are rallied around a

sustainable development issue, some focused on the natural environment, some on the social. The initial partners are public as well as private and all are rather big players – provinces, municipalities of big cities, large corporate enterprises, banks. KC is involved as so-called quartermaster and process consultant. They come together and invest in a newly formed foundation, which puts into practice the ambitions of the partners in a variety of ways. In a later stage, a larger number of partners is attracted to be part of the PPE, this time also smaller organizations, to further its agenda and grow in influence. The three cases are the Social Impact Factory, C-Creators and Smart Climate Opportunities. These are briefly described in the sidebar. A detailed description of the three cases, including history, partners, and activities, can be found in Chapter four.

After gathering a detailed understanding of the cases, this research aims to gain insight in how different constellations of actors – through a designed network structure – relate to each other through interdependencies. Secondly, it aims to explore how this structure, through interdependencies, influences perceived collaborative advantages and collaborative inertia, and third, it hopes to assess how actors construct their reasons to stay engaged with the PPE. This leads to the following research question:

How is the structure of Dutch sustainable development ecosystems influencing interdependencies, and by extension the opposing forces of collaborative advantage and collaborative inertia between (public and private) partners?

Social Impact Factory

Started by the municipality of Utrecht and Kirkman Company, this foundation aims to foster social entrepreneurship in Utrecht, but also broader in the whole of the Netherlands. It supports entrepreneurial solutions as a way to address social issues, local and self-sustaining. The Social Impact Factory (or SIF) has realized more than €600,000 in revenues for social enterprises, while addressing more than 15 different societal challenges, and co-operating with over 100 different organizations, including social initiatives, social entrepreneurs, corporate businesses and governmental bodies.

C-Creators

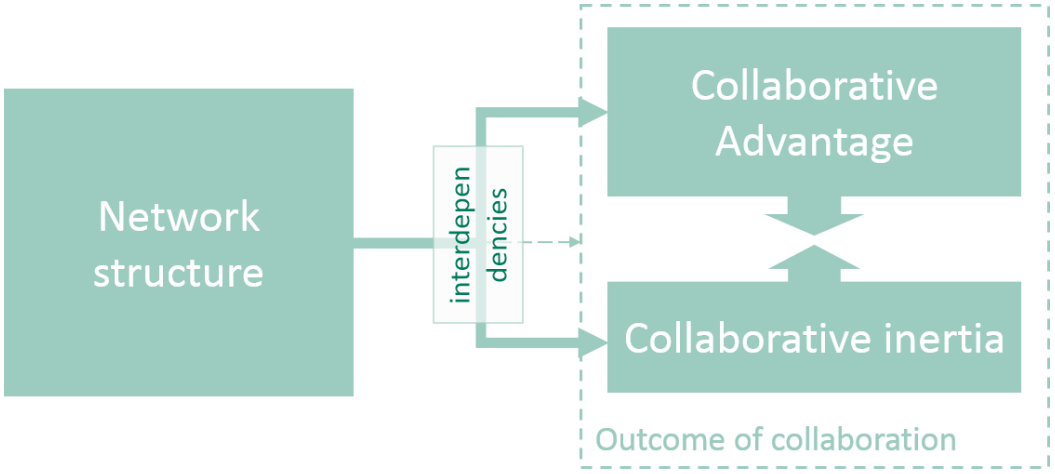
C-Creators was started by Schiphol Group and Rabobank Regio Schiphol, in collaboration with the municipalities of Haarlemmermeer and Amsterdam. It aims to further develop the circular economy in the region and the Netherlands as a whole, specifically in the construction sector. C-Creators (or in this research: CCR) has since set up 'Bouwprogramma's', where innovation and business development of partner organizations are fostered on a regional or local scale. At the same time, it functions as a knowledge hub, where best practices can be shared and retrieved.

Smart Climate Opportunities

Smart Climate Opportunities (or SCO) was started by pension funds APG and PGGM, in collaboration with Eneco and Kirkman Company, and found a home on the Brightlands Smart Services Campus in Heerlen. This campus focuses on AI, Blockchain and Climate Change, and SCO centers around the last. It has five focus areas: Sun and wind, Green hydrogen, Self-production of electricity, Health and nutrition, and Photonics. In these areas, SCO is a knowledgeable partner, providing partners and clients with inspiring sessions, four-day bootcamps and online resources. SCO also guides initiatives in these areas, often in start-up stage, towards action and growth.

A graphic description of this question can be seen below.

Figure 1: Conceptual framework



1.3 Scientific and Societal Relevance

The popularity of public-private partnerships, networks or ecosystems has been prevalent in the sustainability or environmental fields, starting around the 1980s (Glasbergen, Biermann & Mol, 2007). The phenomenon has since been studied by a variety of research fields, such as organization studies (concerned with how the collaborative dynamics are best managed), policy studies (concerned with how these partnerships function as governance structures) and political and sociological attempts to place this development in its larger liberal-democratic context (Glasbergen, 2011). While a lot of research is done into setting up such a partnership (e.g. Gray, in Glasbergen et al., 2007), subsequent long-term existence and effectiveness are just as important – if not more – for a partnership to truly have impact. This is especially true when they address sustainability issues, as those issues tend to require a long breath (Loorbach & Rotmans, 2006). Furthermore, this research will apply Marsh & Rhodes theory on policy networks in a public-private (mostly private) setting; and combine it with collaborative advantage and inertia theory as discussed by Huxham and colleagues in an attempt to build a broader theory on interdependencies in collaborations.

This research is societally relevant because it explores a potentially fruitful way of addressing sustainability issues, as a complementary addition to government-led initiatives. It can inform those involved in setting up a network or partnership to consider how to ensure its long-term existence and effectiveness – as mentioned before, they risk being stuck in a first, not very effective stage. For example, the way interdependencies play a role in a partnership, may shape ideas about what (type of) partners should be added to the network, in what way. The same could hold true for partnerships that already exist, as they tend to be constantly renegotiated. In this way, these collaborations will have the most impact towards sustainable societal transitions. One of such actors often involved in setting up public-private ecosystems is Kirkman Company (KC), a Dutch consultancy firm located in

Baarn. This research has been carried out at this consultancy firm and therefore hopes to be especially relevant for its consultants.

Chapter 2: Literature review

In this chapter, the landscape of public-private collaborations is explored. We start standing atop a hill, looking out over the forest below. We notice three distinct social systems, or social spheres, each trying to address sustainability issues: state, civil society, and market. None of them can address the challenge alone, rather, they need resources from the other systems, they need to collaborate. Collaborating does not come natural to them, especially the market sphere, which is rooted in competition rather than collaboration.

We climb down. Mid-descend, we start to notice that despite many difficulties and differences, actors from different spheres are in fact collaborating. They find ways for all partners to benefit from the collaboration. One way in which they can do so, is the type of collaboration this research focuses on: fostering a public-private ecosystem (PPEs).

Even further down, now in the valley, we can observe three individual trees, or the three cases this research focuses on. Armed with knowledge of their broader context, we can better understand these three samples. There are some key concepts that are likely relevant on case level, that will be discussed in the final portion of this chapter, leading to the fleshing out of the conceptual model, and the presentation of three sub-questions to the research question.

2.1 Looking out over the valley: who is involved?

2.1.1 State

Policy makers, and as their extension, the state, are certainly involved in selecting and supporting sustainability initiatives through a variety of policy instruments. It is the state's prerogative to act in the public interest, which is the basis and legitimization of all policy and it certainly seems that it would be in the public's interest to maintain a livable, healthy environment.

Many policy strategies, on local, national and supranational levels have been influenced by a theoretical framework called transition management (Loorbach & Rotmans, 2006). This perspective focuses on socio-technological innovations, somewhat assuming that the best innovations alone will survive, at which point it can ignite change in all other spheres – political, cultural, economic. While the idea of evolution through variation and selection seems intuitive, policy makers cannot wait until social and political selection has happened, they have to write policy, i.e. actively take a stance (Meadowcroft, 2009). This is of course especially true in certain urgent matters, such as climate mitigation – which requires "rapid and far-reaching" transitions between now and 2030 (IPCC, 2018). The state will need to intervene before 'natural selection' of innovations has taken place, which is

difficult. On top of that, the state itself is merely operating in a global system affected by the degradation of the natural environment yet can only affect this system itself in a limited way.

There is a mismatch between the local or national political system and the global economic and natural systems; between individual citizens' interests and collective interests; between short and long-term gains. To leverage the risk involved with crafting policy despite these mismatches, while facing a multi-facetted and urgent problem, state actors may choose to cooperate with other societal spheres. This way, they can ensure awareness and acceptance of the resulting policy of different stakeholders; they can share accountability; improve legitimacy; and in the meantime, gain more insights and learning for future reference (Olsthoorn & Wieczorek, 2006). One such spheres they could cooperate with, is civil society.

2.1.2 Civil Society

Civil society organizations can be broadly understood as NGOs not operating in either the market or for the state, such as charities, associations, media, political parties, foundations and a range of other organizations. They educate and mobilize the public on a variety of issues, and so there are also organizations concerned with sustainability issues (e.g. Greenpeace, WWF, The Ocean Cleanup). These environmental organizations tend to see for themselves a key role in addressing the many challenges society faces. They do this by addressing these issues, through educating the public in such a way that they care about these problems and demand action – from market *and* state. This gives the state the public mandate as legitimacy to act, but also gives a range of incentives to market players to act.

2.1.3 Market

Market players have a relatively high influence on the environment, not in the last place because they are causing most of the emissions and extractions. In the Netherlands, for example, about a sixth of the total yearly CO_2 emissions are caused by heavy industry, such as Shell, DowChemical and AkzoNobel (NOS, 2019). Under civil society and state pressures market actors have begun to change some of their practices. Some act in compliance to (stricter) regulations, some to avoid risks in terms of public outcry, or unsatisfied employees. They can also refer to their core values and e.g. adopt CSR activities that fit its mission and vision. Lastly, companies might be driven by the *business case for sustainability,* where they see opportunities for making profit while also creating environmental and/or social value – usually based on the fact that 'it sells' (Austin, in Glasbergen et al., 2007). All of these efforts are hindered by the fact that currently, interventions of the market with the natural system (e.g. emissions, degradation, resource extraction) are not accounted for in market prices or costs. Instead, they are *externalities,* i.e. external to the market. This implies a twofold lack of incentive for market players to address their environmental impact (that is, in theory). First, doing so would increase their private costs, while saving something external – so not decreasing any private cost. Second, gathering knowledge or skills in how to address these issues will not increase profits either,

because there is no price to pay for the externalities in the first place – and so no profit to be had over solving them. Investing in them will only weaken their position vis-à-vis competitors. This is related to the idea of *The tragedy of the commons,* as first described by Hardin (Hardin, 1968). Any common resource – that is, a resource that is free to use for everyone, and everyone depends on for their functioning – will eventually be degraded. No one actor can stop this degradation, nor is it in their interest to stop exploiting it when competitors are not. It is, however, in everyone's interest to manage the resource better, because otherwise the common resource will eventually be depleted or completely degraded beyond use – "freedom of the commons brings ruins to all" (Hardin, 1968, p. 1244). Collective action is needed to preserve the resource for all of those that depend on it (Ostrom, 2008). Cooperating to ensure a common resource does not come natural to the market – which is rooted in competition and individual self-interest rather than cooperation and collective interest.

2.2 What's in it for me?

In economics, resource-based theory proposes looking at competing firms not as their products competing in a market, but as their whole production system competing with each other (Mintzberg, Ahlstrand & Lampel, 2009). Translated into organizational strategy research, what then becomes the root of competitive advantage, and thus key to organizational survival and thriving, are all resources the firm uses to produce its output, not just the end product. These resources can be raw materials or technologies (tangible resources), but can also be organizational culture, learning mechanisms, experience, relationships etc (intangible or "soft" resources). How these resources are then woven together constitutes the unique production system that competes with others in a market (Mintzberg et al., 2009). To keep their successful set of resources, firms must assess which resources are most strategically important. Barney (1991, 1995) has set four criteria for key resources that firms should seek, exploit and protect most:

1. Valuable: meaning that a resource should have the capacity to improve efficiency or effectiveness in some way and is therefore of value to the organization

While value is important, competitive advantage means being not only being good, but being better than the competition. That means that strategic resources should also be

2. Rare: there is not an abundance of it, therefore it is in high demand. Competitors are less likely to also have this resource.
3. Inimitable: it is hard for competitors to copy the resource and/or hard to substitute it with some of their own resources.

Finally, having the resource that is valuable to you, and not readily available to competitors is great, but only helpful if you can use the resource efficiently. This means the resource must also be

4. Organized: the resource must be organized in such a way that the firm is capable of putting the resource to its best use, or alternatively, the firm has to be organized in such a way that it is capable of putting the resource to its best use.

It becomes clear how much the concept of advantage in this case is rooted in competition and a sort of 'survival of the fittest' mentality. A valuable resource that competitors also have access to (thus is not inimitable and probably less rare), is not a strategic resource and deserves less attention, theory implies. This brings us back to the conclusions on the market sphere of society and its likelihood to collaborate or act on collective – rather than individual – goals. If the consequence of collaborating means giving up your key strategic resources, which in turn means weakening your production system as it is directly competing with others, then long-term survival of the firm is threatened. Suddenly, we find ourselves in an existential crisis – when all we wanted was to address societal issues no one societal actor can solve by themselves. No company will help solve world issues if it means their inevitable bankruptcy. But the problem here is that a 'we need to survive' mindset can turn into such a 'zero-sum' mindset as described above, whereby one actor's gain must mean another actor's loss. But what if the gain of one actor can mean gain for another actor as well? What if instead of zero-sum, there can be a win-win?

This is what scholars have tried to capture in the term *collaborative advantage,* "of course, deliberately intended to contrast with the more familiar 'competitive advantage'" (Huxham & Macdonald, 1992, p. 51). Originally used to describe alliances between public organizations, this concept is sometimes referred to as *cooperative advantage* in private organizations – but the terms are mostly interchangeable nowadays (Ketelhöhn, 1993). The key idea is that organizations collaborating are more effective or efficient together, either than others in the sector, or than without the collaboration (Huxham & Macdonald, 1992). The term collaborative advantage, then, refers mainly to those things that make a collaboration work, such as sharing risks, resources, network, learning from each other, or any other basis for synergy (Huxham & Vangen, 2013). Some of the valuable, rare, inimitable resources can suddenly be available to others, provided that they also share their own. These resources are difficult (or impossible, expensive, slow etc) to get access to otherwise. Theoretically, Huxham says that a collaborative advantage is an outcome of collaboration "no organization could have produced on its own and when each organization, through collaboration, is able to achieve its own objectives better than it could alone." (Huxham, 1993, p. 603). This outcome cannot be a zero-sum game, all partners should be able to achieve an advantage, even if one partner's advantage is larger than another (Huxham, 1996).

Describing collaboration in terms of collaborative advantage is an interesting start, but it is also missing a key aspect. Why, if all actors are benefitting from advantages, can collaborations still fail? A framework on alliance failure, as built by Park and Ungson, based on an extensive review of the

literature, finds that in inter-firm alliances two key reasons cause eventual failure: interfirm rivalry – pursuing their own interests instead of shared interest – and managerial complexity – the cooperation becomes too complex, cost of coordination too high (Park & Ungson, 2001). Rivalry seems less important in public-private partnerships. The firms in the partnership are cooperating with different societal spheres, which tend not to be their direct rivals because they do not operate to maximize profits, or do so in a different market than their own. Though, it is possible that different private actors involved are offering competing services. While working with very different partners might neutralize – or at least lessen – the threat of rivalry, it does nothing to decrease complexity. In fact, it could be argued that including a myriad of social actors makes a collaboration more complex, meaning managerial complexity is likely to be high in collaborations across social spheres. In fact, as described in resource-based theory, any resource too difficult to organize, is less desirable. So too with collaborations. They can be plagued by all kinds of bureaucracy, coordination costs and complexity in general, making the process inefficient and slow. This is referred to as the concept of *collaborative inertia* (Huxham & Vangen, 2013). If managerial complexity is the cause, inertia is a likely outcome: a slow, bureaucratic process, which makes it impossible to get access to even the most effective collaborative advantages, in an efficient way.

2.3 Climbing down to the public-private ecosystem

Conceptualizing different collaborations, actors and dynamics can be very insightful, but this research only focuses on a specific type of collaboration. As a consequence, the types of actors and dynamics present are much narrower than those that have been roughed out in the first section of this chapter.

2.3.1 Public-Private Ecosystems as collaborations

The specific type of cross-sector collaboration this thesis will focus on will be referred to as public-private ecosystems (PPEs). This is because the hosting organization, a consultancy, has a Practice of consultants (a loose department around a certain area of expertise) called Public-Private Ecosystems. The collaborations they are setting up or have set up are thus generally referred to as PPEs. The PPEs are networks of actors interested in addressing a certain societal challenge, mostly started by a handful of important stakeholders – both public and private, though usually little civil society organizations are involved (see sidebar on p. 9 for a short description of the three cases). Their activities are based around a specific societal issue, related to sustainable development in some way (social entrepreneurship, upscaling climate mitigating innovations, using circular economy principles in construction). The activities themselves tend to focus on granting access to partners, to education, recent insights in the field, capital, or a larger network. For example, SCO offers a four-day educational event for partners' employees where they learn about climate change and the energy transition, they listen to inspiring stories and are challenged to come up with solutions of their own. C-Creators hosts

all sorts of events, where partners come together and share their do's and don'ts on a certain circular construction 'hot topic'. This provides partners not only with knowledge, but also a potential platform to show off their expertise, or at the very least a networking opportunity. SIF has recently set up a Social Impact Bond for the province of Noord-Brabant, which matches funds and banks to social entrepreneurs that want to address social issues plaguing Noord-Brabant.

The structure of the PPEs consists of a central foundation and partners around it. This means that the shared goals and activities are monitored and executed constantly by the foundation's staff. Partners themselves appear to interact less intensively, other than in the context of the foundation's activities, such as supporting a specific project of the foundation together. For example, different partners of SIF are involved in recruiting, supporting, and financing social entrepreneurs in the Social Impact Bond named above. Who exactly is involved differs across PPEs, but in general there are at least some governmental bodies and some larger corporates involved.

2.3.2 Policy networks

To analyze relationships governmental actors may have with others, a well-known theoretical concept is that of policy networks. Policy networks refer to networks of actors formed around a certain public department or institution, who try to influence policy (Marsh & Rhodes, 1992). As they need the state, the state needs them too, for legitimacy and implementation of their eventual policies (Mol, 1995; Marsh & Rhodes, 1992). These networks exist on a continuum, from relatively stable, highly integrated network with just a few key partners called a policy community, to a loose, dynamic, larger network of interested but independent actors called an issue network (Marsh & Rhodes, 1992). For the policy communities, their longevity or sustainability is theorized to be based in a high degree of vertical interdependence (Marsh & Rhodes, 1992). Meaning, the parties involved are (or perceive to be) directly dependent on each other for (a part of) their value creation and/or share service delivery responsibilities (Marsh & Rhodes, 1992). When a national government drafts policy, it can be highly dependent on local governments, but also market actors, for actually implementing and monitoring it. The responsibilities for delivering this value are shared. And based in this shared responsibility, or highly integrated value creation, exists interdependency. This interdependency makes the actors in a policy community committed to it, therefore making the community itself tight-knit and stable over time (Marsh & Rhodes, 1992).

The total focus of the policy community framework on – well – policy, is understandable. However, it might mean missing some important incentives to take part in partnerships. With some conceptual leniency, many at face value policy related concepts could be applied to other actors as well. A naturally formed policy network consists of those making policy, and those wishing to influence that process in some way (Marsh & Rhodes, 1992). In a PPE, a governmental body tends to be involved, but the network is not centered around them – also, they are voluntary, not naturally formed. So the

network can therefore not be referred to as a policy network in the original theoretical meaning. That does not mean, however, that the concepts used are useless in other societal spheres. This idea was previously explored with the triad-network approach as proposed by Mol (Mol, 1995). Much like the three societal sphere approach used earlier in this chapter, this approach looks at a network of actors in any given industry or sector from three perspectives: as a policy network (geared towards developing fitting policy – comparable to Marsh and Rhodes), as an economic network (governed by economic interests), and as a societal network with its societal (moral or normative) concerns (Mol, 1995). In PPEs, plenty of economic and policy related incentives likely exist, as well as normative ones, though usually the only civil society organization in the network core is the central foundation itself. The triad network approach emphasizes that policy network theories can be applied to different social spheres, even when they engage with these in slightly different ways, or for different reasons. This is similar to what this research aims to do with these useful – though in principle perhaps out of context – concepts of policy networks.

2.3.3 A closer look at interdependencies

The glaring caveat when applying Marsh & Rhodes conception of interdependency to a different context, namely PPEs, is not *that* they are not centered around government alone. As Mol shows, it can be applicable to other spheres as well. Instead, the caveat is *why* they are not centered around government. As previously explored in the chapter, the sole responsibility for sustainable development does not fall on a governmental body alone, nor on a market actor alone, nor on some combination of market and government actors. The topics the PPEs focus on, such as social entrepreneurship, or circular design in construction, are not anyone's responsibility.

Yet, partnerships such as the PPEs are addressing those issues, are gathering and spreading knowledge, connecting interested parties, and as such, they are an opportunity. The main difference between Huxham and Macdonald's collaborative advantage in collaborations, and Marsh and Rhodes' stable policy communities lies in what interdependence means in each context. According to Huxham and Macdonald, a high degree of collaborative advantage keeps a collaboration relevant for everyone involved – as strict vertical interdependencies would in Marsh and Rhodes' writings – not because they share responsibilities, but because it allows for better goal attainment by all involved. In that case, the organizations in question do not need each other directly, as vertical interdependence implies, but can strengthen each other, or obtain advantages through collaboration that they otherwise would not have. Simply put: they do not *have to* collaborate, but they *want to* collaborate. Huxham and Macdonald conceptualize the degree to which organizations actually use each other for goal attainment on a three-point scale from superficial co-ordination to the mid-level co-operation, where organizations interact to achieve their own mission or goals better, with at the other end

collaboration, where organizations work together to pursue their own mission and goals, but also pursue a shared goal or *meta-strategy* (Huxham & Macdonald, 1992).

Both theories are in that sense quite similar. They give interdependencies a large role in explaining why organizations continue to work together, and both theories assume the concept exist on a scale. This is visualized in figure 2 below.

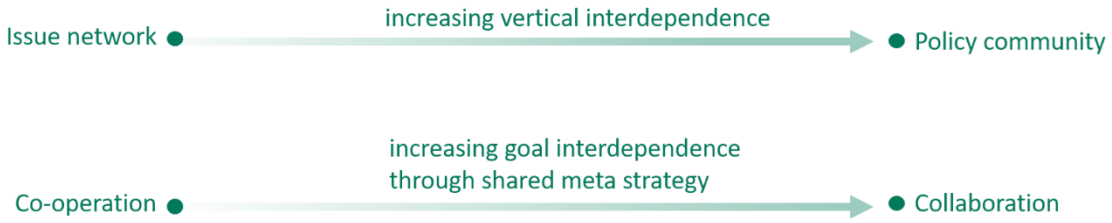


Figure 2: Interdependencies, as discussed in Marsh & Rhodes (1992) and Huxham & Macdonald (1992)

This research will therefore use many concepts related to Marsh and Rhodes' policy networks to examine the PPEs, and assume, as they do, that network structure is largely shaped around resource dependencies (Marsh & Rhodes, 1992). However, to claim strong resource dependencies are resulting in direct vertical interdependencies, making the collaboration stable in the long-term, does not fit the types of actors involved. Instead, this research will use Huxham and Vangen's ideas on why organizations collaborate or not, through the concept of collaborative advantages and collaborative inertia – and so interdependencies in the pursuit of organizational and collective goals are likely more relevant than vertical interdependencies related to service delivery or value creation.

2.4 Our three trees: case level concepts

Synthesizing all this information, one could start to carve the PPEs out of their broader theoretical surroundings. But in order to answer the research question posed in the first chapter, one would also need some more operationalized sensitizing concepts which are likely to be present in the cases. These concepts can be helpful when drafting sub-questions to the overarching research question, to answer the question in multiple, smaller steps.

2.4.1 Network structure and interdependencies

In policy network theory, policy networks are clusters of organizations, which are theorized to be held together and structured through the availability of or dependency on each other's resources (Marsh & Rhodes, 1992). This dependency or structure can be described by available resources, but also by other dimensions, such as the degree of integration between partners and resource distribution (Marsh & Rhodes, 1992). Partner organizations "manoeuvre for advantage deploying their constitutional-legal, organisational, financial, political and informational resources to maximise [their influence over] outcomes." (Rhodes, 1990, p.19). The type of resources partners can get out of or bring into a collaboration differs across partners and PPEs. In the PPE cases, there are many private

parties involved, in which case their constitutional-legal resources might be less important. Financial resources are quite straightforward, and likely recognizable in interview responses. Any financial contributions to or from each other, or clear financial benefit (e.g. sales increase) should fall under financial resources. Political resources are defined differently across authors, with Rhodes (1986) maintaining that it refers to "access to decision-making" and "legitimacy deriving from the fact of an election" (Rhodes, 1986, p. 101). In this context, that might be slightly too rigid, because people in private organizations tend not to be elected. However, viewing political resources as (decision-making) influence and legitimacy (though an election, but also other bases for legitimacy) would work. Informational resources could be content knowledge, but also certain skills or capabilities, classified by Rhodes as expertise (Rhodes, 1986). Finally, organizational resources are named by Rhodes (1990) as part of his 1986 framework but are not actually defined there (Rhodes, 1986), only hierarchical resources are. These hierarchical resources would be relevant in multiple levels of government, where one is assumed to be 'higher' than the other, namely the national government. In PPEs, this dynamic is unlikely to be present. However, besides (political) influence, information or knowhow, and financial resources, a clear missing element one could get out of a policy community would, in fact, be those related to the organization in question. This organization can offer certain services or products in an easier way to partners than to outsiders. It could be useful to have access to its infrastructure, e.g. logistical system or physical location. Furthermore, because of an organization's way of working, they may have access to a large network, and can thus provide a brokerage function to others. Similarly, they may be able to provide a platform or a degree of visibility that others do not have. Besides these concepts, it is of course possible other resources are named by interviewees – those mentioned here merely serve as sensitizing concepts.

Only characterizing a network's resource dependencies by resources perceived by partners, misses important information. For example, if a partner mentions they feel they gain knowledge from the PPE, but then also mention they only go to an event once a year - their knowledge dependency might not be very strong. Alternatively, if the resources they depend on are paid for per session (so resource access is consultative, instead of exchange based), there appears to be more of a supplier-type relationship than an interdependency in an ecosystem-type relationship. Also, to find out whether dependencies are formed both ways, the location of important resources needs to be clear: does everyone have valuable resources, or only some?

So, besides perceived resources, the characteristics for network structure include partner integration and resource distribution, with its subcategories of access to and location of resources, as conceptualized by Marsh and Rhodes (Marsh & Rhodes, 1992). This leads to the following concepts of interest regarding network structure:

Table 2.1: Network structure dimensions

Network structure dimensions		
Perceived resources	Financial	Financial contributions
		Financial gains
	Political	Influence
		Legitimacy / Credibility
	Informational	Knowledge
		Expertise
	Organizational	Products / Services / Infrastructure
		Network / Brokerage
		Visibility / Platform
Resource distribution	Resource location	All have valuable resources Some have valuable resources
	Resource access	Exchange-based access Consultative access
Integration	Frequency of contact	High Low
	Quality of contact	High Low
	Stability of contact	Stable Fluctuating

The research should therefore assess, as a sub-question:

1. How are Dutch sustainable development ecosystems structured in terms of resources, resource distribution and integration?

2.4.2 Collaborative inertia, collaborative advantage and their relation to interdependencies

The collaborative inertia concept will mainly build upon the framework for alliance failure by Park and Ungson, as discussed in section 2.2. They found failure usually comes from rivalry – where collective goals are sacrificed to pursue individual, often short-term, goals – or managerial complexity, which makes the collaboration too inefficient, coordination costs too high (Park & Ungson, 2001). Both of these factors are mentioned by writers discussing public-private partnerships, such as Agranoff and McGuire, and Huxham and Vangen.

Rivalry often can take the form of direct competition between partners (Park & Ungson, 2001). However, and this is the main way Agranoff and McGuire conceptualize rivalry or pursuing own interest over shared interest, it can also be observed as dominance of a certain party, usually the one 'pulling the pursestrings' (Agranoff & McGuire, 2007, p. 17). In our PPE cases, perhaps the central foundation could also assume a more dominant role, because that is the organizations all the others

mostly interact with. So for collaborative inertia caused by rivalry, a first dimension to examine is if participants perceive one or more parties to be unhelpfully dominant, to the point of hampering progress; a second is direct competition being perceived among partners.

The second, and for PPEs far more relevant, reason Park & Ungson mention for alliance failure, which is also emphasized repeatedly by Huxham & Vangen, is managerial complexity. Main causes of this complexity can be found in incompatibility of culture, backgrounds or organizations involved in the collaboration; as well as unclear or clashing expectations, and conflicts of interest (Park & Ungson, 2001). To stand a chance at success, partners must recognize some aims or intentions might be implicit, or even hidden, and can occur at an individual level, an organizational level, and a collaboration level (Huxham & Vangen, 2005). But while all of these issues might be remedied, but this brings the authors to the main issue with complexity: it's costly (Park & Ungson, 2001). The effort needed for coordination then can overshadow the benefits of collaborating, which "is difficult to sustain (…) over time", and so prolonged inefficient collaboration will likely fall apart (Park & Ungson, 2001, p. 44). This leads to the following sensitizing concepts as related to collaborative inertia:

Table 2.2: Collaborative inertia dimensions

Collaborative inertia dimensions		
Rivalry	Dominance	Of paying partners Of the foundation
	Competition	Among partners
Complexity	Coordination costs	High cost
	Efficiency perception	Low (inefficient)
	Incompatibility	Of people Of organizations as a whole
	Mixed expectations	Implicit, explicit Personal, organizational, collaboration level
	Conflicts of interest	Implicit, explicit Personal, organizational, collaboration level

The research should therefore assess how collaborative inertia can hamper the full realization of the collaboration, through answering the third sub-question:

2. How is progress in Dutch sustainable development ecosystems curbed by the restraining force of collaborative inertia?

Perceived interdependencies could increase collaborative inertia because of its complexing nature. Interdependencies could mean that strategies of one party can affect outcomes for other parties (Klijn et al., 2013). More coordination will be needed, more interests are involved in tasks, thus likely increasing inertia, and eventually decreasing performance (Klijn et al., 2013). This is especially likely if actors do not recognize the mutuality and the opportunity in the interdependency (Klijn et al., 2013).

However, they will also likely lead to increased and continued interactions, leading to better outcomes, specifically if dependencies are recognized and taken as an opportunity (Klijn et al., 2013). So, to ensure this opportunity for collaborative advantage can prevail over collaborative inertia, the collaboration should allow for synergies on different levels. The key to this might be recognizing mixed aims and intentions, on a personal, individual level, on an organizational level, and on a collaboration level (Huxham & Vangen, 2005). On an organizational level, this means that interdependencies would strengthen operational goals – thus acquisition of new customers, positioning in the market, or execution of value delivery for current customers, more like classic vertical interdependence as mentioned by Marsh & Rhodes (1992). However, it could also be related to aspirational goals, as is likely the case for collaboration for sustainable development. On a collaboration level, it should allow for furthering a shared meta-strategy, which consist first of all of a clear mission for the collaboration, and a clear benefit if successful (Huxham & Macdonald, 1992). Second, it should be possible to get to this mission by means of reaching shared objectives, for which there are different roles for different participants (Huxham & Macdonald, 1992). This leads to the sensitizing concepts present for collaborative advantage:

Table 2.3: Collaborative advantage dimensions

Collaborative advantage dimensions		
Allows for furthering individual goals		Fits values Fits career/job wishes
Allows for furthering organizational goals	Operational goals	Acquisition
		Positioning
		Execution
	Aspirational goals	Relates to mission
		Relates to (sub) goals
Allows for collective, or shared meta-goals	Shared meta mission	Clear mission for cooperation
		Clear benefit for organization if successful
		Clear benefit for society if successful
	Shared meta objectives	Clear roles for partners towards mission
		Assessment towards goals is possible

This leads to the final sub-question:

3. What collaborative advantages do partners of Dutch sustainable development ecosystems construct in the collaboration?

Adding these sensitizing concepts to the initial conceptual framework, brings us to the following elaborated conceptual framework:

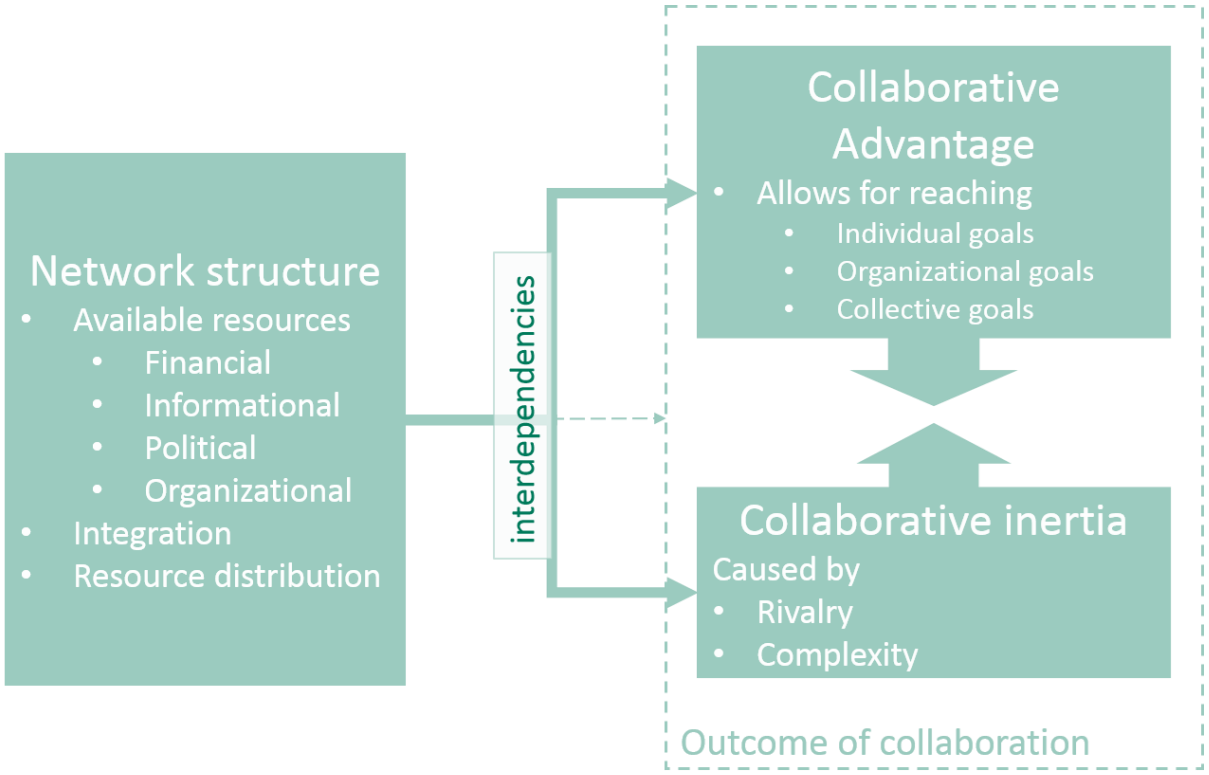


Figure 3: Conceptual framework elaborated

Chapter 3: Methods

3.1 Research Paradigm

This research will follow a relativist ontology and an interpretivist epistemology. This means that the research operates within the social constructivism paradigm. It is assumed that (social) reality is constructed, local and specific (Guba & Lincoln, 1994). This is a sound strategy to research the design of partnerships, and people's motives to continue to engage or disengage with them. The public-private ecosystem – or any partnership like it – only exists because it was once seen as beneficial, and because apparently people continue to see it as beneficial, and thus reproduce its structure over time. It is a clear example of something that is a social construction, rather than a 'fact of nature'. In fact, this social construction is what makes it so vulnerable to disengagement and collaborative inertia. If actors can use their agency to construct a partnership, they can also use it to stop this process of structuration. It is therefore key to understand why and how actors are involved with the PPE, if we want to ensure its long-term effectiveness. Taking a constructivist's perspective also means that it is crucial to reflect on the role of the researcher, and assume the data gathered will be transactional and subjective in nature (Guba & Lincoln, 1994). In constructivism, it is assumed that the role of the researcher cannot be eliminated, rather, it is integral to the eventual findings. As such, the research can only really assess how the different actors construct their motives as they relate to Kirkman

Company, as I will be there as a Kirkman Company intern, not an objective third party. This does require a degree of authenticity, by being honest and reflexive about your own choices, and by checking with respondents whether you have misrepresented anything they said.

3.2 Research strategy and Design

This research aims to qualify results rather than quantify them. At its core, it is about the meaning or purpose of actions, which the research aims to map and understand. This asks for a rich understanding through in-depth conversations with those making the decisions, i.e. qualitative data. A further benefit of qualitative over quantitative data for this topic, is that quantitative data in its effort to *only* study variables, it strips them from their context (Guba & Lincoln, 1994). The context is precisely so important in these cases, because any decisions are made completely embedded in their context. To address this, the research will use case studies. Case studies are ideal for the topic of this research because while data is gathered at actors involved with the PPE, their reasons for doing so may well lay outside of the PPE frame – e.g. in the organization they are representing in the PPE. This, again, means the boundary between case and context is blurry, making a case study the best way to get a full picture (Yin, 2014). The cases were selected in concord with consultants at Kirkman Company (KC). KC has been involved in setting up the ecosystems and thus is familiar with the actors involved.

3.3 Case selection

The cases selected are the three PPEs that the PPE practice has set up in recent years. All three available cases were selected to be researched. The reason for this was twofold. First, the consultancy agreed to provide me access to their contacts in the foundations, but for them it would be most useful to have somewhat generalizable findings, at least for their context. Therefore, they preferred a comparative research over a single in-depth case study. Second, it was initially hard to grasp what exactly the studied PPEs were. Something that was helpful in that respect is comparing and contrasting the different PPEs. In other words, using multiple cases allowed for some more generalizability (at least conceptually or theoretically – statistical generalizability was never the aim), and using multiple cases gives the researcher a better grasp of the PPE concept, by exploring more than one and seeing differences between them. The three cases are 1) the Social Impact Factory, or SIF, which was started by the municipality of Utrecht and Kirkman Company in 2015. 2) C-Creators, which will also be referred to as CCR in this research. This was started in 2018 by Schiphol Group, Rabobank Regio Schiphol and Kirkman Company. Then finally, 3) is Smart Climate Opportunities, or SCO, which was started by pension fund APG, Ruud Koornstra and Kirkman Company in 2017. In depth descriptions of these cases, based on documents and the interviews, will be discussed in chapter four, Findings I – Case Descriptions.

The cases are suitable to research this research question, because none of the three collaborative networks were formed naturally. Therefore, it is likely that the design or structure of the network, was

a deliberate choice, either explicitly or implicitly, to maximize benefits (or collaborative advantages) for those involved. Clearly, the current designs have thus far been effective at sustaining collaboration – no 'failed' ecosystems could be researched, however, the cases do lend themselves for research into even better, or more efficient designs.

3.4 Data Collection and Analysis

The research has been conducted between February 2019 and August 2019. The data collection phase was executed in May and June 2019. Data was gathered through interviews and by collecting relevant documents.

3.4.1 Documents

Documents allow for background information on the *who,* the *how* and the *what* of the PPEs. The collected documents consist of documents detailing who were involved in the PPEs and what the initial partnership agreements, or coalition of the willing looked like. This is important both in preparation for the interviews, and to check what respondents said about specifics afterwards, as a means of triangulation.

Documents used are the following:

Table 3.1: Documents

Case	Name document	Type document	Year	Referred to as
SIF	PvA vooronderzoek	Powerpoint slides	2014	sifPVA (2014)
	Master Implementatieplan	Powerpoint slides	2014	sifMIP (2014)
CCR	'The Willing' Strategisch document	Pdf	2017	ccrTW (2017)
SCO	Climate Change Solutions 'Why How What'	Pdf/powerpoint	2017	scoWHW (2017)
	Ideation sessie	Pdf/powerpoint	2018	scoID (2018)

3.4.2 Interviews

The interviewees consisted of people involved with a PPE. KC and the foundations have been involved in inviting interviewees – as well as providing materials on the three cases. It can therefore be assumed that respondents were picked who have a more favorable relationship to the PPE, so already strained relationships would not be stressed further. The research aims to explore reasons for partners to stay involved, so having people who chose to exit the PPE would have been valuable, but unfortunately, I did not have access to them. A list of all interviewees and those that were invited but rejected can be found in the appendix. All interviewees were introduced to the researcher by a liaison at the foundation. Then, all interviewees were invited to actual interviews by the researcher. Often, the invitations were made to the people most involved with the foundation. Most were quite high up in the organization and referred me to one of their colleagues (who presumably had more time) – some

of the higher-up people did talk to me. Because of the (sometimes double) intermediary between the researcher and the invitee, not much control could be exercised in choosing respondents.

For SIF six people were interviewed, five from different partner organizations, one from the foundation. The same was done for CCR. For the case of SCO, as less organizations are involved in the ecosystem, only four interviews were done, three board members and a fourth person representing PGGM. Some others were contacted as well, but they all rejected the invitation, had little time, or were unresponsive. Per PPE, one KC consultant was interviewed, as one of the partner organization interviews.

Most interviews were done face-to-face, at the workplace of the interviewees. A few were conducted over the phone, namely scoRK, scoCA, sifRK, scoGS and ccrAB. Interviews lasted for about 30 minutes. The interview guides were slightly adapted per case (SCO, SIF, CCR) and per respondent. All interview guides used will be added to a separate appendix, as well as the transcripts of these interviews. During the actual interviews, the guides were used mostly as a topic list, not so much set questions. The discussion should allow for all kinds of insights, so a semi-structured interview fit the research's explorative purpose best. Two interviewees declined to be transcribed literally, so at their request, there is only a report of the conversation, not a transcript.

The interviews were made up of three main topics. First, they were asked about how they got involved in the PPE, what reasons they had for engaging with it, and to what degree they believed the PPE was an efficient way of organizing. Second, they were asked to reflect on the ways they were currently involved with the PPE, and whether it helped them to achieve their own goals, operational goals (value delivery), aspirational goals (such as mission and vision, long-term goals), and finally whether a shared purpose was being pursued. Third, this shared purpose was explored further, and respondents were asked to reflect on (inter)dependencies and synergies between their organization, the foundation, and the other involved partners.

3.5 Operationalization

To operationalize the research questions, the sensitizing concepts in Chapter 2 were used, which were then incorporated into interview questions. Not all specific concepts were asked about, e.g. for resource dependency, not all dimensions were discussed separately (are you financially dependent on [PPE], are you dependent on [PPE] for knowledge etc). Instead, respondents were asked to reflect on what they get out of being a part of the PPE, and sometimes probed further. Most respondents came up with plenty of resources without being specifically asked about each. For the full concept to question table, see Appendix 2.

The questions were somewhat adapted per interview, based on the role the organization has within the network. This was based on the broad, unstructured narratives that I was given about the PPEs by KC consultants during my internship, and the partner and foundation websites.

3.6 Reliability and Validity

Reliability will be safeguarded by documenting different decisions taken – such as how cases were chosen, or how and when data was gathered. Other than that, it will be hard to completely claim reliability in a constructivist study, because the findings will be partially dependent on the researcher – and as such are transactional and subjective (Guba & Lincoln, 1994). Second, they will also be transactional and subjective from the side of the interviewees. The interviewees construct their partnership and can change as they have more or better insights. It cannot be claimed that in a year's time, results will be the same, even if the researcher is the same.

Validity is certainly important, specifically construct, internal and external validity. To ensure construct validity, the research will use two sources of evidence for a degree of triangulation, namely interviews and documents. Furthermore, the chain of evidence will be made as transparent as possible, so verbatim interview transcripts will be included where possible (Riege, 2003). To ensure internal validity, this research will employ within-case analysis – what do different interviewees say about the same event; do interviewees contradict themselves even? Why? – and cross-case matching of these patterns (Riege, 2003). Finally, external validity relates to the transferability of results to other cases or theory in general (Yin, 1994). In this research, three cases are researched, and findings on each sub-concept will be subjected to cross-case comparisons. By employing this multiple case study methodology, and comparison between them, some findings may be corroborated to establish a degree of external validity (Lincoln & Guba, 1985; Yin, 1994).

Chapter 4: Findings I - Case descriptions

Findings can take different forms. In this research, the cases are complex and interesting all by themselves. To allow for deeper analysis regarding the research's key concepts in Findings II, it is important to first have a clear understanding of the foundations. These will be described here in Findings I. Findings I explains how and when the foundations were established, what they do, and what the roles are of the partner organizations of which employees were interviewed. Often, some (or many) other partners are also involved in the PPE, that no one was interviewed about. As those are less relevant for the interview quotes and other results, their roles will only be included, if absolutely necessary for understanding the current structure of the foundations.

4.1 Social Impact Factory - SIF

4.1.1 History

The Social Impact Factory was started by consultancy firm Kirkman Company and the Municipality of Utrecht in 2015. It was a continuation of the spirit of an event that they organized together a year before: the Social Enterprise Days (sifSM; sifPVA, 2014). This was an initiative of Kirkman Company,

who felt it would be valuable to have the municipality there as well, because of the possible opportunities it would provide for public-private co-operations in the field of social enterprises (sifDR). This was around the time that the municipality was given more responsibilities from the national government, such as areas of employment and healthcare (sifDR). After the first successful Social Enterprise Days, KC and the municipality started researching whether it would be possible to offer more structural support for social enterprises in a public-private cooperation (sifPVA, 2014). This was eventually launched as the Social Impact Factory on the second Social Enterprise Days, a year after the first one (sifDR), at which point they planned to be an online and offline hotspot for social entrepreneurship (sifMIP, 2014). Later, a physical location was found near Utrecht Central Station, where the SIF could be based. The premises and its exploitation were separated from the hotspot activities (knowledge/expertise hub, supporting and accelerating social entrepreneurship initiatives), with the first becoming a social enterprise, the second a foundation.

4.1.2 Roles

KC has been one of the founding partners of the SIF, and has been involved with setting up the foundation's activities, financial streams, governance structures etc. Currently, a few of their consultants work on projects for the SIF (sifRK), e.g. on business development and the execution of projects. There is no other formal link between the consultancy and the SIF after a degree of controversy arose because of what seemed to some as business interests in the foundation. So now the consultancy firm is partner in the ecosystem, and supplies consultants to work there, but does not in any way own the SIF (sifRK). Recently, there has been a move towards closer cooperation again, because there seemingly were a lot of opportunities for both parties to strengthen each other (sifRK). The municipality is the other founding partner. It gave both the foundation and the premises a threeyear starting up subsidy, which has now ended for the foundation, and almost ends for the enterprise (sifDR). Initially, the municipality was much more involved with the foundation than it is now. It had an employee working detached for the foundation for some time, and was acting a sort of launching customer for some of the foundation's products (sifDR). However, over time this preferential-seeming disposition towards a foundation in the city – and so, not towards other foundations – was criticized politically and deemed unwanted (sifDR). There currently are no more special formalized ways of collaboration between the municipality and the SIF, but the municipality has kept close ties with both the foundation and the enterprise, and is part of SIF's ecosystem (sifDR). Corporate 1 has been involved with the SIF since its inception as well. It acted as one of the founding or launching partners for the ecosystem (sifMM). From time to time, SIF projects are advertised internally within Corporate 1 as a corporate responsibility project for employees. An employee can help set up and execute a (small) project/workshop on social entrepreneurship, and use their skills

and knowledge on business operations, auditing etcetera to help social enterprises in the Netherlands. This is done pro bono as part of Corporate 1's community investment programme (sifMM).

At the start of the Social Impact Factory, a group of already existing social enterprises in the municipality's network were asked to join as founding or launching partners as well (sifSM, sifMIP, 2014). One of these is Social Entrepreneur 1, an impact first IT company, who deliver IT test services with at least 80% of turnover being generated by people with autism, most of whom have trouble working elsewhere (sifSM).

The University of Utrecht was starting, around the same time as the first Social Enterprise Days, to set up a Social Entrepreneurship Initiative (SEI), which included a research chair on the topic, to which Harry Hummels was appointed in 2016 (sifHH). After the SIF had started, the SEI and the SIF started to collaborate on different projects, whereby theory and practice could inform each other (sifHH). Currently, the university is part of the SIF ecosystem, but is looking for ways to cooperate even more extensively.

Examples of current activities

The Social Impact Factory as a foundation is involved with many larger or smaller projects. In general, they can be grouped together in three categories. First, challenges, whereby a larger organization, usually governmental, issues a start-up challenge on an issue they think might be solved by social enterprises or start-ups. SIF consultants guide this process, help operationally, and provide access to the social enterprises in their network. The second category is labs, whereby SIF consultants facilitate multiple sessions, such as ideation or scenario building. The third category is ventures. These are larger projects, an example of which is Plan Einstein, an EU funded program aimed at fostering communities of refugees and locals.

4.2 C-Creators – CCR

4.2.1 History

C-Creators was started in 2017, by Guido Braam of PoweredByMeaning (the holding to which KC also belongs), Schiphol Group and Rabobank Regio Schiphol, in collaboration with a host of other public, private, and public-private partners. It came from the physical circular hotspot, C-bèta, which was already being built in Hoofddorp. The idea existed to create a circular consultancy type foundation, which later turned into a platform and meeting space for people working toward circularity in construction in Metropool Regio Amsterdam (ccrWT). It focuses on circular economy in general, and the construction sector specifically, because they felt it was desperately in need of knowledge and expertise around circularity (ccrTW, 2017).

4.2.2 Roles

Kirkman Company took a process supporting role in the initial phase. Now, there is one KC consultant working for the foundation (ccrWT). He has been involved in CCR for much of its existence, thus providing some continuity and a familiar face to partners.

Schiphol Group was one of the founding partners. Currently it is part of the ecosystem, and part of the community of practice of Haarlemmermeer. Representatives of the airport often visit events etc organized by CCR, and frequently share their circular experiences as well (ccrMH, ccrLH)

The other founding partner was Rabobank Regio Schiphol, who invested a large sum of money into CCR, as part of their societal dividend – as they do not have shareholders, but do have profits, part of these profits are gifted to foundations, or other organizations in society that need it. They still are a large financial partner of CCR (ccrAB).

A large real estate developer is also involved in CCR, as a partner of the community of practices. They are paying a fee and can therefore visit sharing sessions, events. They can also bring in a case for the consultants to work on (ccrLH).

The same is true for a large engineering consultancy, who are partner of the community of practices. They are rather active and have also been involved with giving some masterclasses etc for CCR (ccrJF).

4.2.3 Examples of current activities

C-Creators' activities can be grouped together in two main categories. First, there are communities of practices (CoP). These are location based, such as the CoP Haarlemmermeer, and tend to include the municipality and companies operating within that municipality. CoPs organize sharing sessions, events, masterclasses etc, to make sure best practices can be shared (ccrMH). It therefore serves as a platform, but also as a networking opportunity (ccrJF). The second category consists of projects. In return for the fee organizations pay to be a partner of CCR, they can bring forward projects, which CCR consultants then work on. Examples are inspiration sessions organized with interesting people in the CCR network for a particular partner (ccrJF), or strategy-related session with people from within the organization to get on the same page on their circular ambitions (ccrLH).

4.3 Smart Climate Opportunities - SCO

4.3.1 History

In 2015, Willem Vermeend, former State Secretary for Finance and former Minister for Social Affairs and Employment, Ruud Koornstra, an entrepreneur often involved in sustainability-related business, Joep Beukers, innovation director at Pension fund 1, along with others from Eneco and Pension fund 2, were involved in a thinktank (scoRK). This thinktank was an initiative of then Minister for Finance Jeroen Dijsselbloem as a result of the signing of the Paris Climate Agreement in 2015: how was the country going to reach the mitigation goals in it (scoRK)? The ministry of Finance saw a role for the Dutch financial sector, that had always had global allure, but had staggered since the crisis in '08

(scoRK). Up until then, sustainability was mostly seen as risky and expensive by the financial sector (scoRK).

Out of this thinktank the idea emerged to start a foundation that could bridge the gap between innovative sustainable start-ups and large investors such as pension funds. They could also re-educate some of the financial sector on the topic of sustainability. This way, the transition towards a sustainable and innovative future could be accelerated. Although the participants in the thinktank had plenty of enthusiasm and ideas, their new initiative lacked a home.

Separately, the Brightlands campuses in the province of Limburg were founded: public-private innovation hubs to create jobs and foster innovation in Limburg. Pension funds 1 and 2 were collaborating with the municipality of Heerlen and the province of Limburg on one of these campuses, namely the Brightlands Smart Services Campus (BSSC). Located in Heerlen, this campus aims to develop innovations in the field of data science and smart services (scoGS). It includes Techruption, an open innovation community around three themes: Blockchain, Artificial Intelligence and Climate Change. While TNO and the OU and UM were involved with the first two themes, initially there was no obvious candidate for the climate change theme (scoCV).

Through Joep Beukers, these two initiatives found each other (scoRK). Joep connected SCO to the BSSC to shape the cooperation program around the Climate Change development theme for the partners of BSSC. They involved Cas van Arendonk, as with him Kirkman Company, as a quartermaster and process supporting party (scoCA). SCO has been implementing this program on behalf of Pension fund 1 since October 2017.

4.3.2 Roles

Both pension funds are involved with SCO because they invested in and are partners of Techruption. However, Pension fund 1 is mostly made responsible for SCO, and has multiple employees working in kind for the foundation. Whereas Pension fund 2 employees were also involved in the beginning of SCO but not anymore (scoCV, scoGS).

Within SCO, the current role of KC is to provide network or brokerage between parties (scoCA). There are also consultants (1 FTE) working on business development and operational execution of the program (scoCA). They do this for a reduced fee (scoCA, scoCV).

4.3.3 Current activities

Current SCO activities exist in two separate branches. First, there is an educational branch to SCO, in which SCO is involved with education on climate change (scoRK). For example, they have an online MOOC on climate change, but also a serious game about the energy transition called Conquest for Paradise, and organize longer (e.g. four-day) tracks for partner employees to learn about climate change and energy, and urge them to come up with new ideas (scoRK, scoGS). The best of these new ideas can then be taken into the second SCO branch.

The second branch is putting into practice what the first branch teaches: doing projects around energy transition and climate change (scoRK). An interesting current example is the DLE (dienst landelijke energietransitie), which is piloting transforming current energy structures in housing estates into net-zero housing (scoCA; scoGS).

Chapter 5: Findings II – Core concepts

In Chapter 2, we established wanting to learn about the forest by looking at the trees. We want to enrich existing literature and understanding of partnerships for sustainable development by looking at three cases in depth. Subsequently, a methodology was specified and for context, key information about the cases was presented in Chapter 4. In the first part of this chapter, we learn about the trees by looking at what data we have on their characteristics: its branches, its leaves, its trunk. The structure of the PPEs, the collaborative advantages and inertia experienced by participants. All the gathered data gives us a good idea on how each tree functions. However, when wandering around a forest, it is always wise to not just look at trees, but to also watch out for pitfalls. While close-up examination is interesting, it is not the purpose of this research. We wanted to understand the trees, because it would help us understand the forest. Therefore, in the last part of this chapter, an attempt is made to aggregate the data on each of the core concepts and make them into a whole again. What can we say, in general, about the influence of the concepts on each other? Where do interdependencies come in? What can, in the end, provide the most useful insight into the workings of the forest?

5.1 Network structure

5.1.1 Guiding questions

The first sub-question is the following: how are PPEs structured in terms of resources, distribution and integration?

Operationally, this means looking into resources perceived in the network, resource distribution, and integration. Are organizations sharing financial, political, informational and/or organizational resources – other words: what is gained? What is given? How are these resources distributed - are resources flowing both ways or just one way? Is access to these resources exchanged or sold? And finally, how integrated are partners with the collaboration? How frequent, stable and of high quality is contact between partners?

The network structure, as constructed through conversations with multiple partners, is summarized in tables 5.1 through 5.6. These tables are possibly too rich in content to be understood at first glance. Therefore, the sensitizing concepts and most important findings are elaborated on in the sections as well.

5.1.2 Social Impact Factory

First, the perceived resources in the SIF partnership will be discussed. These resources are placed into the following categories: financial, informational, political and organizational resources. Then, the degrees of integration and types of resource distribution will be assessed.

Financial resources can either be financial contributions (paying) or financial gains (receiving). Financial resources mainly flow from partners to the central foundation. The foundation does not, however, rely on these fees as their main source of income, which they get through larger projects. These tend to be the result of targeted sales, rather than come from the network (sifMH). Two interesting financial relationships exist first between the founding consultancy and the SIF, and the municipality and the SIF. The only partner included in this research that directly gains financially from the SIF – besides also paying a partner fee – is KC, which has consultants working for the SIF. They are executing projects, doing sales and business development, so that when they bring in large projects for the SIF, they are paid for their work on those. Second, the municipality is not a formal partner in the same sense as the others, and therefore does not pay a partner fee. They have in the past provided subsidies to start up the foundation, which stopped a few months ago. They are still a paying client of some of the SIF's platform products, such as the Buy Social online platform.

Informational resources consist of knowledge and expertise. Specific knowledge and expertise are provided to the SIF by Corporate 1, and by Kirkman Company through its consultants. The university and the SIF exchange knowledge and expertise, whereby practice informs research and vice versa. The municipality has used the knowledge or experience they gained from being involved with SIF, to further social entrepreneurship within the municipality, both informally and formally through policy.

Political resources in this research are either degrees of influence or legitimacy/credibility. Having many partners does help the SIF gain a degree of legitimacy to operate in the social entrepreneurial space, despite not being a social enterprise themselves. In turn, partners get some political resources as well. These are rarely explicit, but perceived to be present and highly valuable. Mostly this comes down to the SIF propagating social entrepreneurship as a concept, and specific social enterprises in their network of (mostly public) organizations. However, within the municipality of Utrecht, they have quite a hard time doing so, because of some controversial perceptions in the past. So, even those in the municipality that are fans of the SIF, cannot easily have them do projects or assignments for them, if it will seem like preferential treatment.

Finally, organizational resources SIF offers to partners are mostly in their network. However, actively making linkages and developing the community is not SIF's core business. Kirkman Company sees some great opportunities for linking their complementary networks: their corporate network to SIF's government-related network.

The network is further characterized by a mixed degree of integration. While most respondents agree the quality of interaction is high (sifMM, sifHH, sifRK, sifDR), they are mixed on frequency and stability. Some people admit that much of the collaboration falls on them personally, or just a few people involved with the foundation (sifDR, sifRK). Others say the contact is good, but just does not happen a lot (sifSM, sifMM, sifDR). Only for Kirkman Company is this something that they feel could or should be improved, others are mostly fine with the way things are (sifSM).

The private partners tend to think they hold more valuable resources for the foundation, than the other way around (sifRK, sifMM), whereas public and social enterprise partners seem to think the trade-off is mostly equal (sifSM, sifDR, sifHH). Access to these resources is exchange-based for most interviewees (sifMM, sifSM, sifHH). However, for Kirkman Company, some of it is quite literally consultative. The same holds true (especially formally) for the municipality, to avoid looking like preferential treatment in any way. Synthesized results on network structure, as given by interviewees, can be found below.

Table 5.1: Network structure SIF – resource dependencies

SIF case	Financial resources	Informational resources	Political resources	Organisational resources
Partner 1 (central foundation)	Not financially dependent on partners. Does projects for larger public or private organizations. This is most important in terms of financial viability	Large amounts of experience and knowledge around social entrepreneurship. Partners are also knowledgeable – some have very specific knowledge, such as Corporate 1.	SIF has built a credible name for itself. They like to match network partners to each other and elsewhere, where they can. Also, having many partners provides them with legitimacy to act in this field.	Network is seen as very valuable by most partners. However, this is not SIF's core business.
Partner 2 (Social enterprise 1)	Is named, but very limited. Explicitly mentioned that Social enterprise 1 does not have a financial gain in the SIF. Does give a fee to SIF, but that is not much.	Recognizes that SIF can be a source of knowledge, but that they are not the target group for most their expertise.	Values the SIF's network of public organizations, where it is serving the interest of social enterprises in general, and them especially. Legitimacy or credibility is **big.** The creating of a context for social enterprises (by SIF). They are meanwhile are living proof of the ideas SIF propagates. There is a clear mutual strengthening.	Network is very important, but mostly the network of the SIF works well for Social enterprise 1, not the other way around. Brokerage is appreciated. Visibility/platform function is not perhaps in a way that generates sales, but is satisfying and strengthening, and could grow.
Partner 3 (Corporate 1)	Financial resources flow one way: from Corporate 1 to SIF	They are the clear source of knowledge in the partnership (though very specific knowledge)	SIF does serve their interests elsewhere, to a limited degree. Might grow in future.	The type of organization provides a learning opportunity for Corporate 1 consultants. SIF is also

			The legitimacy of the SIF provides them with excellent communications, and a great credential for sales	seen as an interesting network party.
Partner 4 (university)	Financial resources were barely discussed in this interview.	A mutual dependency in terms of knowledge and expertise, where the university brings theory, and the SIF bring practice.	The interviewee does not mention any political reasons for the university to be involved with the SIF	The network of both organizations is also named as a possible point of mutual strengthening, albeit always second to knowledge and expertise. The physical location is beneficial in terms of visibility.
Partner 5 (municipality)	Complicated financial history, mainly of subsidies. Recently, the municipality has stopped providing 'starting up' subsidies. They are also a customer of the SIF, for example a license to the social impact market.	The municipality has used the expertise of the foundation (e.g. expert meeting on social entrepreneurship) and uses their experience at SIF for drafting policy.	Political influence is not really exercised for or through the SIF. This is likely due to the political controversy in the past.	In terms of network, they cannot really help each other, because of some political controversy in the past. Informal network connections still exist. For example, the interviewee continues to be the point of contact for social enterprises coming to the SIF for help, so strengthens the SIF in that regard.
Partner 6 (consultancy, KC)	Financially there are two dimensions to the relationship. First, as a partner, KC pays to be part of the SIF network. Second, they are employing consultants with projects done through the SIF, so those financial resources flow back to KC.	In terms of knowledge, experience, competencies, they perceive this to be from them to SIF mostly, through the consultants working there.	The political value is mostly from the SIF to KC, that they have a different (and complementary) positioning in the project/consulting market, namely among public organizations, rather than private organizations. Also: KC's ambitions to deliver entrepreneurial solutions to societal issues, depends partially on the success of the SIF.	In terms of organizational resources, KC and SIF both have extensive networks, in the case of SIF in public organizations and among social enterprises, in the case of KC among private (often corporate) organizations.

Table 5.2: Network structure SIF – integration and resource distribution

SIF case	Integration	Resource distribution
Partner 1 (central foundation)	Some partners are more involved with the network than others.	Some partners bring highly valuable resources, such as Corporate 1 doing their administration. However, some

		partners also have a sense that they should receive more from the SIF, when they themselves do not make much of an effort.
Partner 2 (social entrepreneur)	Contact is limited in frequency, but appears very stable and of satisfying quality to both SIF and Social enterprise 1	Resource distribution is two-sided, but most resources lay with the SIF. Access is exchange based.
Partner 3 (corporate)	High quality interaction. Stable, integrated in Corporate 1's CSR. Not very frequent (depends on available projects)	Resources are mostly on the part of Corporate 1. They are accessible on an exchange basis.
Partner 4 (university)	Frequent, high quality and stable relationship. Partnership is also more widely supported in the organization, than just the interviewee.	Clear two-sided resource distribution. Access is exchange based.
Partner 5 (municipality)	Moved away from high integration under political pressure. There still is frequent contact, but this mostly comes down to the interviewee.	Resources are distributed two-sidedly. Access is consultative (SIF as supplier for certain knowledge/projects etc)
Partner 6 (consultancy, KC)	Formally, moved away from integration as the foundation needed to be fully independent. Is currently looking into reintegrating the two more. Informally, contact is very frequent (with consultants working for the SIF), and of high quality and stability.	Resources lie on two sides, although they perceive that more resources are with them, than they are on the side of the SIF. They are accessible partially in a consultative way (with literal consultants), but also partially exchange based (e.g. network)

5.1.3 C-Creators

First, the perceived resources in the CCR partnership will be discussed. These resources are again separated into financial, informational, political and organizational resources. Then, the degrees of integration and types of resource distribution will be assessed.

Financially, all interviewed partners are paying a partner fee, to be able to attend events, workshops, or similar activities, and to get access to the consultants working for the foundation, who do projects for partners. Most partners perceive this fee to be a large investment, and while they may not expect to get immediate results, multiple partners do find it difficult at times to justify the current financial structure (ccrMH, ccrJF, ccrAB). The foundation itself recognizes the financial dependency towards their partners, but stresses this was mainly an issue when just starting up – only a year ago in 2018, when they had to incur a lot of costs. By now, multiple partners carry their overhead costs.

For informational, political and organizational resources, a clear dichotomy can be observed between respondents. There is one group, consisting of the airport, real estate developer and to some degree the bank, that do not have a lot of knowledge on circularity inhouse, but do have circularity-related goals. In the cases of the airport and the real estate developer, these goals relate to their own

operations, in the case of the bank, the aim is to better help clients that have circular projects. These partners therefore mainly emphasize the informational resources they gain, and secondly network, as an organizational resource to be gained. The second group, consisting of the engineering consultancy and to some degree Kirkman Company and the bank, do have knowledge or expertise over a specific part of implementing circularity (engineering, process consulting, financing). They therefore are less helped by gaining more knowledge, but more by being offered a platform, or visibility in that field. To position themselves among other partners that could be interesting future clients.

All partners bring in some interesting resources, though most also feel that most resources are on their side, not on the side of the foundation. The foundation acknowledges that what is valuable for partners is not only different per partner, but also in flux (ccrSS). When they were just starting up, partners meeting each other through CCR was interesting. However, after a while they could find each other on their own (ccrSS). So now the added value of CCR is less related to the brokerage/network function and focuses more on creating and sharing knowledge (ccrSS). As such, the second group, who are less interested in knowledge and more in a platform, could feel less served by the foundation.

In terms of integration, while most partners assess frequency and quality of contact as high, stability is not guaranteed. The partnership need to be renewed on a yearly basis, and multiple partners indicated some uncertainty in the stability of the cooperation, because of the combination of a (at least perceived as) large partner fee and the uncertainty in what exactly their added value is (ccrJF, ccrLH, ccrMH). Synthesized results on network structure, as given by interviewees, can be found below.

Table 5.3: Network structure CCR – resource dependencies

CCR case	Financial resources	Informational resources	Political resources	Organisational resources
Partner 1 (central foundation)	Dependent on partner fees financially, especially for funding when just starting up (2018)	Doing projects, workshops, events offers value to participants – though not always as much as they hope	Specifically in the beginning, having larger players involved (airport, a big bank, municipality, MRA office, cirkelstad) was big for credibility.	Network was something interesting they offer(ed), but as by now, partners know each other, this becomes less relevant, and projects become more important. Also: they focus on sharing knowledge, not on being a broker for partners' acquisition.
Partner 2 (airport)	Investing quite extensively in CCR.	CCR's advisors can aide progress in their ambitions regarding circularity. Especially their expertise with the creativity and flexibility needed for these larger transitions.	According to the interviewee, the airport's involvement provides CCR with a degree of credibility, whereas they may not be taken seriously should the airport not participate in the	Most important role for CCR is bringing people together to talk about circularity, inspire, network etc. The airport is dependent on their contractors to become more circular regarding

			community of practice Haarlemmermeer.	construction, and hopes to take these contractors up in the community of practice.
Partner 3 (real estate developer)	Pays a partnership fee to CCR	The real estate developer is learning from CCR with the project they have done together, but the translation of that ambition into reality, is only just about to begin.	Mutual credibility through 1) the real estate developer integrating more circular principles, and 2) talking about it at the CoPs with others, showing how CCR can be of help in such a larger project. Though: this has not really happened yet.	The network is very interesting for them, especially regarding their links in public organizations, with people in those organizations interested in circularity.
Partner 4 (consultancy)	CCR provides a senior consultant with project hours, so financially CCR is contributing to KC. KC also contributes to CCR because of the reduced fee the consultants ask.	The experience KC had with setting up PPEs has been very helpful in setting up CCR.	The network/credibility of CCR has helped from time to time with other KC clients.	The physical space at C-Beta is named as an inspiring place, that is valuable for KC. It provides an interesting way to get 'boots on the ground' around the circularity theme, and build a useful network, complementary to KC's own network, however, it has not happened much, because CCR's network is highly specific.
Partner 5 (engineering consultancy)	They perceive to invest quite extensively in CCR.	Admits CCR has a lot of knowledge and expertise, but mostly this is expertise they also have inhouse.	They see a possibility where CCR is actively doing 'groundwork' among organizations in terms of circularity, after which it would be easier for them to do more circular projects. However, this is not really the role CCR is currently taking.	CCR is for them a great way to showcase their knowledge and commitment among other partners, primarily among municipalities. A visible 'platform' in the region, where interested parties meet.
Partner 6 (bank)	Rather large monetary dependency of CCR on the bank, given to them through their co-operative dividend (part of profit, that they invest back into society).	They can use the information gathered from CCR and its partners to better serve customers with circular ambitions. They can also spread this knowledge and inspire other local banks to take a look at similar initiatives.	There is a certain credibility that they, as a large bank, bring to CCR, by virtue of just being involved, being a founding partner, even.	The network is also interesting to be in, so that they can be a sort of knowledge broker. They may not know the answer to a client's question regarding circularity, but someone in the CCR network, will.

Table 5.4: Network structure CCR – integration and resource distribution

CCR case	Integration	Resource distribution
Partner 1 (central foundation)	Some partners are more involved than others, some are very open and provide high quality content, others are more shielded.	Some partners – mostly specific employees – are very open and share their experiences in an exchange way, others are more reserved and focus on the projects in a more consultative way.
Partner 2 (airport)	While some people regularly go to CCR events, not enough have gone last year for their 'budget' to be used fully. While contact is frequent for some, it does depend mainly on them, thus might not be very stable, or of as high a quality as it could be.	The airport feels they have most resources in this partnership, but they do see CCR as a means to the end of reaching their circular targets. It works well in that regard, so it is perceived to be two-sided. Access is exchange based.
Partner 3 (real estate developers)	Internal communication on their involvement with CCR has gone well. Frequent contact, the interviewee is doing projects, but others also go to the meetings or events. This results in frequent contact. However, the interviewee also mentioned that perhaps, if she were to leave the company, the partnership could cease to exist in this way.	Resources are distributed in a two-sided way, with the real estate developers giving a degree of credibility (along with the other partners) to CCR and paying a partner fee; and CCR proving a helping hand for setting clear circular ambitions and implementing them in the future. Access is somewhat consultative, by paying the fee, they get access to CCR's knowledge. They do not provide much access in exchange, partially out of fear of competition among other partners.
Partner 4 (consultancy)	Frequent contact through the consultant(s) working there. Mostly informal, but CCR is getting more known within KC now. High quality, stable contact.	Mostly resources lie on the side of KC. While there is a potential for using CCR's credibility or network, it has not yielded much sales yet. It does generate consultant fees. Access is both consultative (with consultants declaring hours) and exchange based (e.g. when it comes to network).
Partner 5 (engineering consultancy)	Integration is going well, contact is frequent, mostly stable, and of high quality.	Two-sided distribution of resources. The engineering consultancy gets a platform among potential clients and get to share some of their knowledge. CCR gets their partnership fee. Could be classified as somewhat consultative access, although they do not pay per hour.
Partner 6 (bank)	Contact with and communication about CCR is frequent, of high quality, and stable.	Resources are both ways with CCR mainly providing (access to) knowledge, though they do feel their financial commitment is rather large, and therefore CCR is quite dependent on them. They

		are looking to share this financial investment with other investors in the future. Access is mostly exchange based.

5.1.4 Smart Climate Opportunities

The case of SCO is a bit different than the other two. Less partners are involved, and those that are, are heavily invested in its success – partially because of large financial commitments. Here, dependencies can really be seen, because larger investments mean larger risks.

Financial resources flow from the pension funds to the foundation, and a reduced fee from SCO to Kirkman Company. This is the largest cost for the foundation (scoCV). More than informational or organizational (network, platform, knowledge) related benefits, as with SIF or CCR, political resources are important - influence, reputation, talking to the right people. The partners also give some political resources, in the form of credibility, to SCO. The involvement of two large pension funds, along with other partners such as Eneco, is said to 'open doors' (scoCV, scoGS, scoCA, scoRK). However, it can also reflect on the foundation in less positive ways, such as the assumption that they have access to plenty of funding already (scoCA).

In second place, knowledge on innovations and investment opportunities were initially reasons to get involved, however, because of the relative long timescale such a thing needs, it is unsure yet when and how much that will happen (scoCV, scoGS). Mostly, expertise of both Pension fund 1 and KC employees (and KC founder Cas) are needed to keep SCO operational (scoCA, scoCV). This is also the case for organizational resources, they mostly flow from Pension fund 1 and KC to SCO, and to a much lesser degree from SCO to Pension fund 2, who sees value in contact with people outside of the 'usual suspects' of other pension funds they usually meet (scoGS). The other interesting resource flowing from SCO to Pension fund 1 and KC is related to their employees working on this topic. As organizations, this gains them insights in emerging fields, that may be of interest later. It also serves as an explorative, innovative space for Pension fund 1 in an otherwise rather rigid organization.

Because there are fewer partners, integration and involvement is much higher, and access to resources is mostly exchange based. This does give this case a lot more friction too, though, which will be discussed further in the collaborative advantage and inertia parts of this chapter. This has caused what appears to be a move by some away from exchange-based access, in favor of more consultative forms of collaborating (scoCV). Stability of contact for Pension fund 1 could become in flux in the future. For the other partners, contact is stable, and KC and Pension fund 1 both see the interactions as high quality and high in frequency. Both quality and frequency are low for Pension fund 2, but their investment is much less too, so this loose contact did not bother the interviewee from Pension fund 2 much (scoGS). Synthesized results on network structure, as given by interviewees, can be found below.

Table 5.5: Network structure SCO – resource dependencies

SCO case	Financial resources	Informational resources	Political resources	Organisational resources
Partner 1 (central foundation)	SCO was financially very dependent on partners (mainly through techruption). Is now looking to market its products to others (non-partners) as well.	They aim to be a knowledge center, but also bring their knowledge into practice by doing projects, and share best practices in that regard.	Political clout is an important part of SCO, e.g. through the involvement of Willem Vermeend, or ties to current Minister of Internal Affairs Ollongren. This is a point of pride, to be lobby-like, even if it does not bring much business, it does bring transition. Further, there might be a benefit to having these well-known pension fund partners, but also a downside, as its appears they have a lot of money, and then others might not understand why the projects still need funding.	Network is very important for SCO, delivering their messages to important people as much as they can. Knowing people is key in getting to know about projects, doing them, getting them financed etc.
Partner 2 (pension fund 1)	Pension fund 1 is investing a lot in SCO, financially. This is because they are also shareholder of the Brightlands Smart Services Campus, of which Techruption, and by extension SCO are part of. They also have people working for SCO in kind, so for 'free'. All in all, SCO is very heavily dependent financially on pension fund 1, but they are also invested in SCO's success as a consequence.	Primarily one way, from the fund to SCO, through their employees. However, the idea also is that, when a project becomes big enough, the pension fund can invest in it too, so then SCO is providing information on energy transition innovation to the pension fund.	They provide SCO with a certain name or credibility, because it is associated with them and pension fund 2. It gets the foundation in high places, they assume. SCO provides them with something to show the market in terms of innovation and CSR, increasing their reputation.	Network is barely mentioned in this interview. However, in terms of core activities or services that their employees do as part of SCO, there is resources associated with that. Mainly related to exploring, innovating, learning.
Partner 3 (pension fund 2)	Pension fund 2 has also invested in Brightlands Smart Services Campus, and in SCO for three years (it has now been 2). However, they are much less invested, because only in the beginning were there people	Similarly, the idea is that, when a project becomes big enough, the pension fund can invest in it, so SCO is providing information on energy transition innovation to the pension fund. This is also quite one way, but	They provide SCO with a certain name or credibility, because it is associated with them and pension fund 1. It gets the foundation in high places, they assume. Also, specifically to them, it was mentioned that pension fund 2 is often	SCO provides them with network, and contact with people outside of the 'usual suspects' of other pension funds they work with, e.g. SCO is close to TNO, banks, Universities.

	working in kind, not anymore. Limited dependency either way.	the other way around than pension fund 1.	recognized in the Netherlands as being a 'green' investor.	
Partner 4 (consultancy)	The consultancy was later added to SCO, and promised that if they grew, more consultants would be hired. In the meantime, consultants are paid a reduced fee. Also, the interviewee, who is a founding partner of the consultancy, does work for SCO for free.	Knowledge and expertise of the consultancy related to setting up these collaborations is brought to SCO.	Political resources are not named by interviewee. In fact, they do not share much of what happens at SCO with the other consultants, until large victories can be celebrated, so something is to show for the hard work.	The consultancy provides SCO with an enormous network of private corporations, where they otherwise would not have had access to.

Table 5.6: Network structure SCO – integration and resource distribution

SCO case	Integration	Resource distribution
Partner 1 (central foundation)	High degree of integration with both Pension fund 1 and the consultancy. Frequent, high quality, stable contact. Not so high quality with pension fund 2, and also much less frequent.	Resources are to be found among all partners, though mostly pension fund 1 and the consultancy.
Partner 2 (pension fund 1)	Highly integrated with foundation. Its people are working for the foundation in kind and are running the activity programme. Frequent, quality and stable contact.	Both have resources, though not equal, pension fund is bringing much more into SCO than the other way around. Exchange based access, but are looking into a more consultative relationship in the future.
Partner 3 (pension fund 2)	Loosely integrated with foundation. Interviewee is present at Supervisory Board meetings, to keep up to date on projects etc. Stable, but low in frequency and quality.	One-sided distribution, on the side of the foundation. The pension fund likes to keep up to date, but other than the financial contribution, this organization does not proactively bring much into the partnership.
Partner 4 (consultancy)	Highly integrated with foundation. Its people are working for the foundation for a reduced fee and are running the activity program. Frequent, high quality and stable contact.	Both have resources, though not equal, the consultancy is bringing much more into SCO than the other way around. Exchange based access, other than one FTE consultants, who work for a reduced fee.

5.1.5 Cross-case comparisons

Looking at perceived resources, integration, and resource distribution, it becomes clear where cases overlap and where they differ.

Financial resources are very case dependent, SIF asks for reasonable fees (according to partners) but as a consequence they need to do plenty of projects to keep the foundation afloat, and do not have much time to manage their valuable community. CCR asks for substantial fees (according to partners),

which allows them to provide a varied program of the Bouwprogramma and separate projects. However, it is a more sensitive topic whether partners will continue the partnership, whether enough other resources flow their way for the fee they paid. As partnerships are for one year, this will likely remain a yearly discussion. SCO depends heavily financially on Pension fund 1, and to a lesser degree on KC and other partners. This asymmetry brings with it some tensions regarding the distribution and access to resources generated by the partnership.

Across cases, in terms of informational, political or organizational resources, there is little strict dependencies perceived by partners. It often even remains difficult to quantify, assess, or justify to superiors what exactly is the benefit of the collaboration. Yet, interviewees across organizations are enthusiastic about their efforts. When probed, each interviewee sees their organization is getting access of some sort, either exchange based or consultative, to something of value. What exactly is given and gained, beyond the financial, is hard to tell. Often, people needed time to reflect on the questions, and came back with more answers later-on in the interview. In general, the larger corporates are involved in these types of collaborations for reputation, CSR or explorative reasons, meaning they can invest without needing much in return from the foundation. Though, exceptions such as the airport, or the real estate developers, who rely on CCR in a much more operational way than e.g. Corporate 1 does on SIF, or Pension fund 1, who are more intimately involved in SCO than perhaps any other interviewed organization. Consequently, both the airport, real estate developers and Pension fund 1 have more intricate considerations and even doubts about what resources they are getting out of the partnership, than the bank involved with CCR, Corporate 1 or Pension fund 1.

The type of resource most salient, is different across cases again, though SIF and CCR are more similar to each other than SCO is to either. For SIF, a variety of resources were named by partners, from all categories, where each partner brings in and gets some resources of different categories. For CCR, partners emphasized bringing in finances, and to a lesser degree (usually only once probed further) a degree of credibility and some expertise. For both foundations, it seems that different partners have different ideas on what they bring in, and what they get out of the collaboration. In the case of SCO, much less discrepancies were observed between partners. Financial contributions and expertise are provided to SCO by Pension fund 1 and KC, and in the case of KC also clearly networking resources. What they gain because of that is mostly political resources (both influence and legitimacy) and some knowledge. Another important resource perceived to be gained is innovation, or exploration of an interesting, but only tangentially to the core business-related topic. This comes directly from the nature of SCO's organization, and therefore could be placed under organizational resources.

In terms of integration, SCO has by far the most integrated partners (notable exemption is Pension fund 2). This foundation also has the least amount of partners in absolute terms. One interviewee mentioned that they were in fact looking for more partners, but that it proved difficult. For the type

of projects SCO does, they would ask a very large partner fee to prospecting partners (scoCA). This is related to the nature of the issue they are working on. While the nature of issue SIF and CCR address is each really different, so is the issue SCO is dealing with: climate change mitigation and energy transition. These are very innovative, technologically advanced fields, where new innovations need millions of investment, before they are scalable (scoCA). It would therefore make sense that those involved are partners who are used to dealing with large sums of money, and not too many want to – or *can* join.

SIF and CCR both are characterized by less integration, but overall high quality and somewhat high frequency of contact (as assessed by partners). Stability of contact is in flux in the majority of partners across cases. This does make sense in complicated collaborations, where network structure as a whole is never really fixed, rather continuously renegotiated (Huxham & Vangen, 2005).

Resource distribution seems case dependent too, whereby usually the larger corporates or most involved parties talk about the partnership in an exchange-based access way. Other partners see the relationship as a more traditional supplier-buyer relationship, whereby they mainly provide financial resources, and gain mostly one other resource (e.g. a platform, a network, knowledgeable consultants that help them with a certain project) operate mostly with consultative-based access. Almost all partners agree that all members of the partnership have valuable resources, although many highly involved organizations tend to think they bring in more than others.

5.2 Collaborative advantage

5.2.1 Guiding questions

The third sub-question as formulated in Chapter 2 is: What collaborative advantages do partners of Dutch sustainable development ecosystems construct in the collaboration?

To analyze the degree to which partners can use the partnership to address their goals in a better way than they would alone (i.e. create collaborative advantage), those advantages need to be assessed. Operationally, this means looking at incentives to stay involved with the partnership, because it allows for reaching goals. It also means recognizing the multi-leveled nature of goals, that can be either individual goals, organizational goals, and/or a shared meta-strategy – goals for the collaboration itself, which can be of benefit of all partners and/or society at large. In this section collaborative inertia, or ways in which network structure might negatively affect them, are *not yet* discussed.

5.2.2 Social Impact Factory

The advantages of each partner can be assessed on these three levels: individual, organizational and collective or collaboration level. Individual level goals were not always clearly discussed in earlier interviews, as this item was later added to the interview guide.

The advantages sifSM mentioned were in part towards organizational goals, such as access to public figures and institutions, some sales opportunities, and relations to other social enterprises (though

not many are explicitly useful to them). Mostly, however, he stressed the importance of creating an ecosystem, a context of social entrepreneurship, which the SIF helped shape in a variety of roles, which is beyond their own goals, towards shared societal goals. Of course, while this is beneficial not just to them, it does also help their own organization. Upon asked whether he thought the SIF made it easier for them to explain what it is they did, he answered: "Well, no. We don't have to explain it anymore, at all. (…) I can say: we are an IT company, we deliver IT services, and we are a social enterprise, we also deliver social impact, namely people with autism who have a job. That's it. Done."

The advantages sifMM mentioned for Corporate 1, as opposed to the benefits mentioned by sifSM, were almost exclusively internal. SIF occasionally provides their employees with the possibility of doing a meaningful project (sifMM). Often junior people, who get valuable insights, and more responsibility than they otherwise would have had for a 'real', not pro bono client (sifMM). These colleagues find this valuable. Second, it helps Corporate 1 propagate their mission to create a better working world. Lastly, it can be communicated to clients and others that they 'do good', although MM felt this was perhaps not done to a great extent (sifMM). All in all, the partnership, as it is part of their CSR program, provides mainly organizational advantages. There is the clear idea that through the collaboration, they are contributing to societal goals, but that is because of the role SIF has in that, and they can help SIF. It is not that SIF and Corporate 1 are together accelerating the transition towards a social, inclusive economy. An important note to add to this finding is that the interviewee at Corporate1 is a much less senior employee, than sifSM, who is the founder of his social enterprise and has personally been working with SIF since its inception. Perhaps this could account for some of the internal focus of sifMM's answers.

The university and municipality both saw many options for synergies. Although: plagued by political woes and bureaucracy – especially in the case of the municipality there is or has been plenty of collaborative inertia. The university is opting to give the partnership a clearer framework for collaboration by writing and signing a pact, on how exactly to serve societal goals even better. This is interesting, but as someone working for the foundation said: 'We don't get paid by the university', they need someone willing to pay for the projects, otherwise they cannot pursue them.

The advantages KC mentioned are mostly executing their strategy, building a network in a different societal sphere, and using it as an explorative space – not dissimilar to the attitude APG showed towards SCO. Next to that it is a relatively stable revenue stream – consultants who are working there get paid for those hours (sifRK). There has been some uncertainty regarding the best way for KC to relate to the SIF. In the past, the SIF needed to be completely separate from KC, as to not seem profit motivated, especially when remaining semi-close ties to the municipality. Now that the municipality no longer provides any formal subsidies or support to SIF, the two organizations are growing closer

together, so they can link their complementary networks. This would allow both SIF and KC to get access to more diverse sales and acquisition opportunities.

All of these points relate to a clear organizational advantage. But SIF can also show people that finding entrepreneurial solutions to societal issues is in fact possible (sifRK), which appeals to a broader goal than strictly organizational.

Table 5.7: Collaborative advantage SIF

SIF case	Allows for reaching individual goals	Allows for reaching organizational goals	Allows for reaching shared meta-goals
Partner 1 (central foundation)		Partners are not often the source of bigger projects. A lot of good ideas but: who is going to pay for them? Most valuable partners for reaching organizational goals are larger corporates and public organizations.	The idea that everything that does something is good, does not always work well with a foundation that has certain employees to pay. Perhaps be more selective in the future in who can really help reach strategic goals, because otherwise the societal goal might be lost too.
Partner 2 (social enterprise 1)	Point of pride if the company is doing well and is spreading its ideas	It helps to be introduced in places, and it may help with sales. But mostly it helps to 'infect others with the social enterprise virus'.	This is directly linked to the societal purpose the interviewee sees for the SIF. An enabler of a transition in which social enterprises are mainstream. There is a clear role for the both of them. Social enterprise 1 is an example of a successful 100% enterprise, which operates impact first. SIF can help them grow, and embed them in a larger context by enabling others, linking others etc. The goals both of them, and the collaboration, want, is something that both can and want to contribute to.
Partner 3 (Corporate 1)		Operationally the collaboration helps, with sales and with employee satisfaction. It does also help with more aspirational goals as it is part of their CSR program.	There is a clear societal benefit to helping SIF. Roles named are only those of SIF in a transition towards a social economy. For Corporate 1, the only role is supporting SIF to help it in its societal efforts, not to both work towards it together.
Partner 4 (university)	Some personal connections with people working for the SIF, and a clear interest in the topic.	Serves as a practical context for theoretical reflection, exploration etc. Role of the university to follow current trends and interpret them.	Clear societal aim, in which both parties have a distinct role in researching, educating, pioneering.

Partner 5 (municipality)	Something that is dear to her, an interesting topic	Municipality wants to foster employment and social entrepreneurship, although it only has policy about using it as a means to an end, rather than an end in itself. Therefore, they cannot reach 'goals' set on this topic through the SIF, only think about how it could help address other causes in a social way.	Societal goals are in line with their organizational goals, because those already aim to serve the public and society. However, the initial involvement with the SIF was based perhaps more on fostering it for broader societal purposes, before it was deemed unfair for the municipality to be so involved with SIF by the city council. Now, the relationship has become more transactional and less geared towards making impact together, and more towards using SIF's knowledge to achieve their own goals.
Partner 6 (consultancy)		Positioning in the market, point of company pride, getting consultant's hours through projects acquired through SIF.	Spreading the entrepreneurial spirit both KC and SIF have, putting it to good use, having an impact.

5.2.3 C-Creators

In the CCR case, all interviewees argued that they assumed pursuing their circularity goals through or with CCR would enhance the foundation's standing and effectiveness. CCR was helping them in an operational sense, mostly through their knowledge and network (of their consultants), and partners felt it only right to pay for that, both in monetary terms, but also by giving talks to other interested parties. They less explicitly told me that this would help them in the long term – much more implicit than a social enterprise would feel that SIF is creating a home or a context for them as a social enterprise.

Advantages for the airport and real estate developers mostly boil down to their board setting operational, circularity related objectives, and there not being much indicators for how to measure it, or implement it. Accessing and sharing knowledge is then the only way to find out. This is how it should aide operational goals – but it seems unclear for both organizations if, or how much, it actually did. For shared or collective goals, this was in both cases linked to their personal values, where they believed that executing 'sustainable' projects should not only be done, but be done *right.* This responsibility falls on the person executing them, and if they can make a compelling case for it – using CCR input – than that will have positive effects in their company, their sector, society at large.

For others, such as the engineering consultancy, bank and Kirkman Company, CCR provides the opportunity to showcase their expertise on the execution of circularity. For example: we know how to write good tenders, and have plenty of circular experts (ccrJF), we can finance circular projects (ccrAB), we can guide the transformation process (ccrWT). For them, at least in theory, it provides access to

an interesting network of potential clients. They care less about the projects, and more about the network, or using CCR as a way to position their organization. These are all organizational goals. Overarching goals relate, in all three, but most pronounced in both the engineering consultancy and Kirkman Company, to accelerating the transition away from the linear economy, and a firm belief in collaborating as a way of getting there. This links back, again, quite strongly, to personal values. Not only do interviewees believe this is a good way of transitioning, they themselves also like pursuing those goals, almost using their organization as a vehicle of getting there (ccrJF, ccrWT). They do, however, still need to justify their involvement in relation to their organization, and this can be difficult (ccrJF, ccrMH, ccrLH).

Table 5.8: Collaborative advantage CCR

CCR case	Allows for reaching individual goals	Allows for reaching organizational goals	Allows for reaching shared meta-goals
Partner 1 (central foundation)	Personally very passionate about this topic. Mentioned that wanting to pursue the collective goal too much, without acknowledging organizations' need to survive and turn profits, was something she had to learn when she just started at CCR.	Partners are an important source of income. This income allows the foundation to hire knowledgeable consultants, to better serve partners and to continue existing.	Interviewee feels there is a real implicit agreement among (most) partners that sharing and being open is the way forward. That people who do not want to share a lot for fear of losing their competitive edge will get less out of the partnership themselves too, and usually do not continue to work with CCR in a smooth and insightful way.
Partner 2 (airport)	Interviewee mentions he is personally very much invested in CCR, and often champions CCR among co-workers.	Not yet very clear. Hard to measure, are trying to have a better way to assess if CCR is helping them reach organizational goals	Very clearly. Interviewee believes that bringing other partners of theirs into the partnership will enhance the overall transition towards circularity.
Partner 3 (real estate developers)	Interviewee mentions that the adoption degree of sustainable concepts differs across people, and mostly comes down to the person doing the project (in this case: herself).	They feel they have a clear societal role because of the size of the company. So, it does have some aspirational goals that CCR could help with. In the operational translation of these aims, CCR might be able to bring more circular ambitions to their network of public organizations, which could aide them in the long run (if they have to then work with a municipality that understands circularity)	CCR can definitely play a role in making circularity the norm. It can concretize things, and show others it is possible, to stimulate them to follow suit. However, this is also mentioned as: and when it's the norm, we started early, we will have an advantage.
Partner 4 (consultancy)		Operationally, yes, in terms of consultant hours. In terms of network not as	A PPE is the best way to start a transition such as this one, because no one feels

		much as they would like. However, it is a point of company pride, and aspirationally it refers to KC's entrepreneurial spirit regarding societal challenges.	responsible enough. Then the best way is just talking to people and getting them enthusiastic to join. This is something KC is getting better at through CCR, so it could serve both organizational and societal goals to pursue growth for CCR.
Partner 5 (engineering consultancy)	Personally and professionally invested in accelerating the transition towards a circular economy	It is not yet clear, specifically because the role of CCR is vague. The partnership would definitely be better, if more business could have come from it.	Sees a clear relevance for CCR and the way it works, in strengthening the circular economy movement in the infra or construction sectors.
Partner 6 (bank)		Using knowledge to help clients with circular ambitions. Staying up to date on potential clients that would need financing with a circular project. These are commercial benefits, but the co-operative dividend is not meant to necessarily profit from, more a form of marketing, or CSR. It appeals to aspirational or ideal goals.	They do believe collaborations like CCR can fasten a transition towards a circular economy, and a more sustainable world. However, the interviewee does not mention ways other partners would benefit, or what roles different partners would have in this transition, only that the bank could play a role through their investment in CCR.

5.2.4 SCO

In the case of SCO, fewer partners are involved in the collaboration. As seen in the previous chapter, this means that resource dependencies are already more pronounced than in the other two cases. The same could be said about goal interdependencies, although specifically for the foundation, pension fund 1 and the consultancy firm, who are most involved, not so much for Pension fund 2. For pension fund 2, individual or collective goals were barely discussed, and always related back to organizational goals. Perhaps this is due to the fact that Pension fund 2 is not heavily involved, in an operational way, in SCO. It seems to them mostly a vague, interesting group of people to keep up to date on, without being able to use much of their findings towards goals. Even the organizational goals mentioned are a *possibility* in the future, not as a sure thing.

For Pension fund 1, organizational goals are also a sore point, but in a far more urgent way. The interviewee expressed frustration when people on Pension fund 1's board try to fit SCO's value 'in a spreadsheet' (scoCV). Not only is he heavily invested personally and for the bigger picture, he also believes SCO will be very valuable for Pension fund 1, even if is not as visible yet. He believes it contributes to a culture of innovation, and helps to improve Pension fund 1's reputation.

For the consultancy firm, SCO serves a triple purpose for individual, organizational and collective goals to the interviewee. However, out of those three, organizational goals are again least pronounced. There is a lot of optimism for the future, and a firm belief in SCO, but as of right now, it mostly requires investments of resources (see the previous discussion on resources) and does not bring the organization a whole lot (scoCA).

Table 5.9: Collaborative advantage SCO

SCO case	Allows for reaching individual goals	Allows for reaching organizational goals	Allows for reaching shared meta-goals
Partner 1 (central foundation)	Highly motivated to make SCO work, and personally and professionally passionate about the energy transition and sustainability in general.	Need for branching out, beyond partners, to market SCO's products elsewhere, in order to be able to afford its costs.	"The goal is the boss". The societal goal, impact, is always the main goal.
Partner 2 (pension fund 1)	Employees of pension fund 1, who are working on SCO, want to do something good, something meaningful.	Involvement with SCO can serve to better its reputation, as a kind of CSR initiative. Second, it fosters corporate innovation, innovation which can be used internally, but also could be invested in later too.	Accelerating towards a sustainable economic model, is something the pension fund *should* contribute to, and something that SCO can do through its activities.
Partner 3 (pension fund 2)		Related to keeping up with trends. Possibly investing in promising initiatives, but there are some conflicts of interest between Pension fund 2 and SCO (see collaborative inertia)	
Partner 4 (consultancy)	Interviewee is very passionate about this topic, and very optimistic about where SCO is going, and what they can be doing. "When I dream, I dream of this. We are really making the world a better place"	It refers to the core of the consultancy, their entrepreneurial DNA. Second, of course, consultants are already working there, and in the future perhaps more can be employed, or for a better fee. Third, should it become successful, it can be used as a reputation/image enhancer in communications.	SCO is probably the best way to actually get things done. Because there are only a few parties, and people generally get along quite well, they can quickly agree to do something. The enthusiasm, and the activities they are currently doing, can be of great impact in actually making the world more sustainable.

5.3.5 Cross-case comparisons

The collaborative advantage concept proves useful in contrasting cases, and types of partners, more so than network structure or resource dependencies.

The main difference between CCR and SIF in terms of advantages for partners can be explained by the differing involvement of private actors, and the role they have within the PPE. The topic or issue the foundation focuses on might be useful in analyzing those differences.

SIF aims to address employment and participation of people, including those who have a distance to the labor market. This issue is, by itself, separate from businesses, and mostly a challenge for government – national or local. When SIF was founded, this responsibility had just fallen on the municipality – which then partnered with the consultancy to set up SIF as a way to get the private sector involved. Corporates are thus exclusively part of a possible solution. In the case of CCR, the push for circularity is mainly an issue for the private sector. They are directly participating in the linear economy in an impactful way. Therefore, they might be part of the solution, but are, at least originally, part of the problem. They have responsibility for what materials they use, just like a municipality traditionally has responsibility over labor participation for disadvantaged groups.

For SIF, a corporate player such as Corporate 1 can use its capabilities to address the societal issue at hand – they can help social enterprises and initiatives with their knowledge of business models or accounting (sifMM). This lends SIF perfectly for a CSR (corporate social responsibility) initiative, which it indeed falls under (sifMM), inherently serving a strategic organizational purpose, but also easily relatable to societal goals.

For CCR, large private players like the airport or the real estate developers do not have the capability needed to address circularity. This makes CCR not so much a CSR cause, but a knowledgeable partner, or at least a way to get access to knowledgeable parties. For partners of CCR, a budget is available for consultants, who work for the foundation, to look at a presented case. For this case, consultants can either directly apply their knowledge, or connect to their network and find interesting insights there. Respondents mentioned in this regard for example inspiration sessions organized with interesting people in the CCR network (ccrJF), or strategy-related session with people from within the organization to get on the same page on their circular ambitions (ccrLH). Thus, the consulting role – and therefore advantage towards actual, organizational goals – is much bigger for CCR than it is for SIF, who mainly help (very) small social enterprises, like start-ups. Parties that are unlikely to be able to pay a large fee (sifDR). SIF therefore has to actively look for interested parties to 'buy' their services, for example a Start-Up Challenge (sifDR, sifMH), to be able to continually pay their own employees. As a consequence, partners pay a lower fee, and have less direct benefits from the foundation towards their goals, whereas partners of CCR pay a larger fee, and CCR does not need to sell their services to non-partners - only recruit for new partners, and satisfy current clients (ccrJF, ccrLH, ccrMH).

SCO is quite dissimilar to the other two in terms of collaborative advantages. Many of the people involved are trying to make SCO itself a success, rather than trying to use it in some way to fit to their own organizations' goals – though when asked to reflect on it, they do see such uses. Perhaps this is

because many are themselves operationally involved, and more heavily financially invested. So, on an individual level, they also feel part of SCO, which is not something partners would say about SIF or CCR. Collaboration goals are the goals of SCO itself, which they themselves work on – and so those are also top-of-mind.

If we were to assess how much a collaboration provides the possibility to pursue individual, organizational and shared societal goals across cases, some interesting disparities arise. This was expected, as was discussed extensively in the theory, the market sphere is not used to collaborating, and has to remain profitable for survival. Interestingly, while all private partners stress the importance of organizational advantages, not all of them have found them to a satisfying degree. This is often attributed to the pioneering, hands-on mindset of the PPEs, where things are done, before they can be fully analyzed (e.g. sifRK, ccrMH, scoCA). During this explorative phase, the ability to at least relate the activities to a belief society is advanced, the collaboration is benefiting, and their own individual ideals are met, need to be quite strong to avoid the collaboration falling apart completely. This is especially salient for CCR, where partners commit for just one year. If after one year organization goals cannot be met through the collaboration, not all private partners will renew the contract. Yet, many interviewees were wary of saying it in those terms, may be because it feels selfish to say so – but is it? Excluding some organizations that use CSR-related funds for the collaboration, organizational advantages appear to be a key prerequisite for organizations to stay involved – however, they are often far from clearly present. Matching personal ideals and collaboration goals might bridge an initial lack of organizational benefit, but in the end, all three should be present for continued collaboration.

5.3 Collaborative inertia

5.3.1 Guiding questions

The last concept of interest is collaborative inertia, which is related to these uncertainties about the partnership, and perhaps even conflicts of interest. As formulated earlier, the sub-question concerned with collaborative inertia is: How is progress in Dutch sustainable development ecosystems curbed by the restraining force of collaborative inertia?

This was operationalized as containing both complexity and rivalry as sources for inertia – so in guiding questions, this section discusses: how is complexity constructed? How is rivalry or how are conflict of interest constructed?

5.3.2 Social Impact Factory

In the SIF case, not a lot of instances of collaborative inertia can be reported. The three most interesting cases are between SIF and their network, between SIF and the municipality and between SIF and Kirkman Company.

SIF's network brings them a substantive degree of complexity (sifMH). As mentioned earlier, many partners think their network is a big asset, but they themselves cannot rely on the network or partners

alone to keep the foundation alive and growing (sifMH). They need to do projects with clients. As a result, spending a lot of time doing upkeep and community management on the network is hard (sifMH, sifDR). Some partners are disappointed, especially social entrepreneurs, if they expect to be matched to clients or sponsors. While there is some introducing, this is not SIF's core business. The dependency on external projects also means that sometimes interesting ideas arise in the network, that the foundation can then only pursue if they can find a party willing to pay their wages while working on it.

The relationship between SIF and the municipality can also be described as somewhat complex. This is less related to coordination costs, but more related to a degree of incompatibility, some conflicts of interest and some rivalry. Incompatibility comes from a foundation (one started by a private firm, a consultancy) and a governmental body that needs to remain neutral (sifDR). This has caused some friction or rivalry between different parts of the municipality – though not rivalry between partners in the partnership. Conflicts of interest than arise both within the municipality and between the SIF and the municipality. It is in the interest of SIF to have close ties to the municipality, but it is in the best interest of the municipality to be completely neutral to foundation operating in their city (sifRK, sifDR). The issues with SIF and the municipality that existed in the past mean that the current collaborative structures are complex and mostly informal. Navigating this web of past struggles and current ambitions has lead to collaborative inertia. In fact, the situation had become so unproductive, that the municipality is currently no longer a partner of SIF. They only are a client of e.g. BuySocial, the online platform; and they keep up with each other, but mostly in an informal and non-structural way (sifDR). Lastly, and as a consequence of the complicated history of SIF and the city, Kirkman Company has also experienced degrees of rivalry – though the dominant party is not directly involved with the partnership. Having been involved in the setting up of the foundation, the interviewee said that while KC used to have great ties with the municipality, now it becomes hard to do projects (separate from SIF) for them. Even when they are the perfect party for it, it might still be viewed as preferential treatment: "After that it was an illusion we could still do projects for the municipality (…) Because then it was already coloured by definition" (sifRK). On the side of complexity, the issue which is a potential great source for collaborative advantage, namely linking networks, can only happen if the organizations grow closer together. This is a complex process, and there is some uncertainty in how to best do that.

Table 5.10: Collaborative inertia SIF

SIF case	Complexity	Rivalry
Partner 1 (central foundation)	Who should be involved in the network? Who should be invested in, and who does not bring enough to the table? There is a potential benefit to better screening and community management, but coordination and	Because they do not rely on partners for the main portion of their revenues, dominance of any one partner is not present.

	management cost of it would be higher too. Mixed expectations where partners, specifically social entrepreneurs, have higher expectations of the network and the SIF than they are able to provide. Conflict of interest between interesting ideas of things to do, and projects that actually pay its employees.	
Partner 2 (Social entreprise 1)	Little to no conflicts of interest. Interviewee recognizes that they (as an established social enterprise) are not the target audience for many SIF initiatives or resources. This is not considered a problem.	Not enough involved to perceive any dominance
Partner 3 (Corporate 1)	How to best capitalize on their involvement, e.g. in terms of communication. Other than that: little to no conflicts of interest.	Only work with the foundation.
Partner 4 (university)	Bureaucracy of the university versus young, flexible organization that is the SIF.	Mostly only work with the foundation. In this relationship no one is dominant.
Partner 5 (municipality)	Capitalizing on informal connections, but how exactly is unclear.	When choosing to work with SIF this can enhance a struggle between the City council and civil servants. Therefore the relationship is kept at a distance.
Partner 6 (consultancy)	Independence of foundation versus collaboration; not capitalizing enough on the connection.	'Ruining' some good contacts because of trying this new way of collaborating – dominant party is outside of the partnership.

5.3.3 C-Creators

C-Creators has several partners that not only operate in the same sector, but also offer the same (or similar) services (ccrSS). This makes this case much more prone to rivalry-induced collaborative inertia than SIF. Second, its partners also interact more than SIF's, so complexity and conflicting interests are more likely to be perceived as well. In this case the most interesting partners to look at are the airport, the real estate developers and the engineering consultancy. Those three each provided a valuable point of view on collaborative inertia within CCR. The foundation interviewee confirmed that all three of those people and their organizations are very open in the collaboration (ccrSS). This then sparks discussions on the possible competitors that may also have access. Alternatively, perhaps their openness in the collaboration translates into a frank discussion of complexity and rivalry in the interview as well.

The airport's most valuable insight in collaborative inertia was that there are no real rivals or competitors anywhere near their size (ccrMH). This size of the organization also means that there is a fair degree of complexity and inertia in general *within* the organization. The interviewee said that while the collaboration may not always be fast and simple, it is the only way to establish what they

want (ccrMH). So: collaborative inertia is not always perceived as an enormous frustration, and is relative to what you are used to.

The real estate developers and the engineering consultancy each did perceive there to be direct competitors in the collaboration, but in different ways. The real estate developers recognized that at least one other partner has a real estate developing branch, and that conflicting interests exist (ccrLH). Considering that, they decided to first focus on C-Creators, the foundation, and work with them, and only later will consider doing projects with other partners.

The engineering consultancy has plenty of people in-house that work on circular projects, from engineering to tenders. In that sense, what they would like to do is often closely related to the type of projects the foundation does for its partners (ccrJF). They expressed some concern about how this role might develop in the future. The engineering consultancy does not want to end up paying their 'competitors' for a platform.

Table 5.11: Collaborative inertia CCR

CCR case	Complexity	Rivalry
Partner 1 (central foundation)	For each individual, it is likely a very complex thing to be involved with. They are all personally invested, but also have to think about the interests of their organization, and the shared interests. This makes it hard to manage interests.	Competition between partners is a real possibility, however it does not always lead to inertia. It can, and has in the past, also served as an incentive for organizations to become a partner: "if the competitor is there, perhaps we should too" (ccrSS)
Partner 2 (airport)	Semi-public rules, large scale organization: how do we go circular. What even is circularity? Already very complicated, so some inertia is to be expected. How can we measure what CCR bring us?	Not really an item, no real rivals.
Partner 3 (real estate developers)	Cooperation with municipalities is often difficult, but can CCR help with that?	Possible insider information ending up at competitors. Should this information be shared to transition faster, or should it be retained?
Partner 4 (consultancy)	Many involved partners, how can they be coordinated? Conflict of interest surrounding interviewee: staying at CCR or doing the same thing (setting up a PPE) for the consultancy elsewhere.	No real rivalry or dominant partners
Partner 5 (engineering consultancy)	Ambiguity relating to role CCR: are they platforming them, or are CCR doing the interesting projects for partners themselves?	Possibility of CCR competing with them for certain projects
Partner 6 (bank)	High financial investment in CCR, but with 'CSR' money. Unclear what is should bring them per se – as well as what is reasonable to give. Are there not other financial structures possible?	Circular principled advice of CCR, versus what is financially healthy to finance.

5.4.4 Smart Climate Opportunities

The main partner in an inertia-prone situation within SCO is Pension fund 1. They have to balance their interests in BSSC and SCO with the interests expressed by APG board members. The nature of the investment – namely: in innovation – is not one that tends to yield success immediately (scoCV, scoGS). However, at what point it can be measured how successful the collaboration is, is hard to tell. On the other hand, while they have more interests (e.g. through their share in BSSC) than the others partners, how much more should they be contributing financially? In general, between all parties there is a sensitivity and quite some apparently implicit expectations regarding costs and revenues of SCO and where those should go. This is possibly due to a decrease in Techruption's client account, which led to SCO having to actively market their products to other interested parties (scoCV). This financial stress is likely increased tensions and possible rivalry among financial contributors.

Another conflict of interest was mentioned by Pension 2, which relates to a dominant frame of mind present in the collaboration. SCO actively looks for innovations and small but scalable solutions, however, they have not yet supported a project to a large enough scale for Pension fund 2 to invest in – which is one of their intended goals for the collaboration (scoGS). This illuminates another interesting insight regarding collaborative advantage and inertia. Collaborative advantage relates to being able to use the partnership towards the pursuit of certain goals. These goals do not necessarily need to be the exact same, but they should be complementary to some degree – otherwise inertia might still arise due to mixed and/or implicit expectations.

Table 5.12: Collaborative inertia SCO

SCO case	Complexity	Rivalry
Partner 1 (central foundation)	Talking to the right people, when to stop talking and start doing Complex innovations, need for capital, but hard to find.	-
Partner 2 (pension fund 1)	Dealing with interest in Pension fund 1, BSSC and SCO all at once. Long term investment needed, what about short term return, to show to certain board members?	Unequal partners in terms of payment
Partner 3 (pension fund 2)	-	Small scale projects versus established, investable projects: dominant mindset to pursue new and exciting projects.
Partner 4 (consultancy)	Conflict of interest related to payment of consultants, it is in the best interest of SCO to keep these costs low, but in KC's interest to have enough billable hours.	-

5.4.5 Cross-case comparison

The findings related to collaborative inertia are all not only highly case-dependent, but also partner-dependent. The overall themes are clear.

The first sensitizing concept, rivalry, was not present a whole lot – as was an expectation based on the literature. Only in the CCR case are there competitors among partners, and in that case, partners had to actively consider the repercussions of that situation. It seems though, that is not something that cannot be overcome.

Conversely, almost every interviewee mentions a degree of complexity that slows down or complicates the process of working together – as the second sensitizing concept. All interviewees were asked whether or not they perceived the collaboration as efficient. All respondents agreed that either 1) it is efficient because there is no better way to do it, or 2) it is not possible to say it is efficient, because no one knows what the best or most efficient way is yet. This ties in nicely with the collaborative advantage findings, were many people really believe in what is happening, but it is hard to measure what exactly is gained for their organization. This similar sentiment was echoed across all three cases, emphasizing the pioneering phase the PPEs are (still) in, in a society that is not generally concerned with sustainable development. Any coordination cost is already assumed to be high, so when it actually is, it does not seem to lead to much inertia.

Conflicting interests and mixed expectations also account for a good deal of inertia – though more than the other things named they were often hypothetical: "Let me say it like this: I have not yet experienced it firsthand. (...) But I can imagine a few situations, in which conflicts of interest could come up" (ccrAB). These discussions about conflicts of interest offered a valuable insight in the inner workings of the collaboration, more than asking about resources or advantages – more than once, respondents mentioned potential conflicts of interest that had not even occurred to me.

The only time incompatibility comes up is between the SIF and the municipality, where collaborative advantages lined up well, but the nature or background of the organizations made it untenable to continue their collaboration the same way. Though I have not spoken to the municipalities involved with CCR, none of the respondents mention tensions there – it seems a unique feature of the way SIF was formed and the way it was treated by the municipality in its early days.

5.4 Assembling a whole out of its parts: What about interdependencies?

In section 5.1 network structure was assessed, by means of looking at resource dependencies. In policy network theory, resource dependencies, resulting in vertical interdependencies, structure a network in a way that leads to long-term commitment (Marsh & Rhodes, 1992). In Huxham & Vangen (2005) most advantage can be found in collaboration when there is a 'goal interdependency', meaning individual, organizational and/or shared societal goals are explicitly recognized as linked to the collaboration (Huxham & Macdonald, 1992; Huxham & Vangen, 2005). The key to successful, long-term collaborations therefore seems to be in these two types of interdependencies, whereby in the PPE context it is likely that goal interdependencies are more present than direct value creation or service delivery related interdependencies.

Vertical interdependence of partners based on resource dependencies is basically non-existent in the examined cases. Even dependence between partners and the foundation is not mutual. The foundation is a small, young, not-for-profit organization, and its partners keep it alive – though this is least so perceived with SIF, most so with SCO. Therefore, the foundation is much more dependent on its partners, than the other way around. However, the foundation does provide access to valuable resources, many of whom directly or indirectly strengthen partners. What resources that are exactly differs per case, but in general it consists of a combination of network or brokerage resources, knowledge and expertise, visibility, and legitimacy. An important resource found in the case of SCO and to some degree SIF, that was not included in the initial sensitizing concepts is innovative learning. The sections 5.2 and 5.3 assessed to what degree there are goal dependencies. In most partners, there were two or three levels of goals that were being pursued trough the partnership. A common factor appeared to be that in this partnership phase, it is easy to unite under a shared purpose, and those working towards this purpose tend to be highly motivated individuals. However, it is hard to justify what exactly it contributes to organizational goals, especially to make this measurable or to put a price tag on it. Some private organizations use CSR-related funds for investing in a partnership, in which case the need for quick returns are smaller. Others only contribute a relatively small fee (especially in the case of SIF, or for example Pension fund 2), which also relieves some pressure – almost like every concrete return is a nice surprise. For many others though, there really is pressure for something worthwhile to come from the collaboration. The doubts that pop up then, would be easier to remedy if partner organizations knew what others are planning to get out of it too. The uncertainty, for example, surrounding the (future) role of CCR was expressed by the engineering consultancy and echoed as well by the airport and the real estate developers. The future role of their organization in the partnership was also questioned by e.g. the pension funds of SCO, the bank invested in CCR, and by Kirkman Company about all three cases in varying degrees. Perhaps it is looked down upon 'wanting to make a quick buck' when you are addressing important sustainable development related issues – but it should not be. All private organizations need to make profit in order to continue existing. In starting documents (e.g. sifPVA, 2014; ccrTW, 2017; scoWHW, 2017) the shared purpose is elaborated on extensively, and what could be won from fixing this specific issue. However, mobilized resources to address the issue at hand are then at the disposal of partner organizations – at that point perhaps they could work out more extensively what they could offer each other, so everyone stays involved. This way, insights into collaborative advantage opportunities and collaborative inertia pitfalls could inform network structure.

The conceptual framework presented in this research was drawn based on the idea that network structure can be changed the easiest by participants, and therefore should be a dependent variable. However, the analysis of both collaborative advantage and collaborative inertia shines a new light on

this idea in relation to network structure. Letting goals (advantages) follow from available means (resource dependencies in network structure) does not always make sense in a voluntary collaboration. In fact, perception of goals that could be (easier) obtained through the partnership can likely also shape what resources people perceive to have at their disposal. In this way, it is exactly the multi-faceted nature of an interdependency that can enhance the relevance of the partnership.

Chapter 6: Conclusion and Recommendations

6.1 Research questions revisited

This research has assessed the structure of three Public-Private Ecosystems (PPEs) that were formed in the Netherlands over the last few years. The word ecosystem implies an inspiration from nature, and a network of actors dependent on each other for survival. The partners involved in the voluntary ecosystems of the Social Impact Factory, C-Creators and Smart Climate Opportunities were interviewed and asked to reflect on the collaboration, the things they gained, the things they gave, what they were working towards, and what slowed the process down. The operationalization of these concepts was sculpted around two major theories, namely the policy community theory of Marsh and Rhodes, and the collaborative advantage and inertia writings of Huxham and several colleagues. Organizations that work together in a voluntary setting must have clear reasons for doing so, and this research assessed how their structure in terms of resource dependencies fosters interdependencies – either vertical interdependence, or, in this context more likely: goal-related interdependence. This interdependence of multiple partners could complicate the collaboration in such a way that it might make the process slow and inefficient; but it could also keep the collaboration highly relevant for those involved.

The research question this research aimed to answer is the following:

How is the structure of Dutch sustainable development ecosystems influencing interdependencies, and by extension the opposing forces of collaborative advantage and collaborative inertia between (public and private) partners?

To answer this question, three sub-questions were posed. The first sub-question relates to network structure and resource dependencies:

1. How are Dutch sustainable development ecosystems structured in terms of resources, distribution and integration?

There are very few conclusions around resources and network structure that apply to all interviewed partners in all cases. What could be claimed, is that each partner has a clearer view of what they bring into the partnership, than most do about what resources are available to them through the partnership. Partners tend to mostly interact with the foundation, and not as much with each other, so they have even less awareness of what other partners might bring in.

Partners contribute to the foundations is a few ways. They bring in financial resources (a partner fee), though perception of those fees differ across cases. Partners think SIF's fees are reasonable, or even low, to some almost an afterthought. C-Creators' partner fees are substantial, creating tension over what partners are actually gaining with it. SCO financially heavily depends on Pension fund 1, and this perceived asymmetry with other partners can also generate tensions. Partners also bring to the foundations some degree of credibility (many partners, or highly regarded partners must mean that they are to be taken seriously). Some partners share informational resources (e.g. experiences with certain projects; giving workshops). Most consistently this is done by Kirkman Company – but their consultants do get paid for this (access is consultative, not exchange based). In terms other political and organizational resources such as influence, network, platform, visibility, learning etc, this is mostly something partners get from the foundation, than the other way around – except for in the case of SCO, where these are flowing both ways.

Resources from the foundation to partners are clearly different than those that partners bring in. Firstly, financial resource flows from the foundations to partners almost exclusively occurs for Kirkman Company, but this is justified by providing much needed expertise (and in some cases network connections) in running the foundation. Other than financially, partners find it hard to quantify or assess what exactly is the benefit of the collaboration. In general, the larger corporates are involved in these types of collaborations for reputation, CSR or explorative reasons, meaning they can invest without needing much in return from the foundation – though there are a few exceptions.

For SIF in particular, a variety of resources were named by partners, from reputation, to providing a context, providing expertise, having a positive political influence, or offering platforms. For CCR, some partners perceive to get access to knowledgeable consultants, others emphasize being able to showcase their experience in and willingness to do circular projects. In the case of SCO, partners gain mostly political resources (both influence and legitimacy) and some knowledge. Another important resource perceived to be gained is innovation, learning, or exploration of an interestin topic.

SCO has by far the highest integration of partners, SIF the least, CCR is in between. This could perhaps be related to the number of partners, and the amount of activities being organized for the network. This ties back to the fees – if there is less money to organize things, then the organizations can get less integrated. The number of partners could also be related back to the nature of the issue at hand: there are plenty of social entrepreneurs, but they have less money to spend on something like SIF, there are

fewer construction companies wanting to go circular, but those that do have more investment available. Even less organizations have the type of investment options to go into high tech energy solutions with SCO.

2. How is progress in Dutch sustainable development ecosystems curbed by the restraining force of collaborative inertia?

The interviewed partners were picked and contacted by the foundations themselves, so that likely colors the results in favor of the collaboration. No substantial collaborative inertia was found, except in the case of the municipality and SIF – between which there is no longer a formal partnership.
Inertia was conceptualized to be caused by rivalry and complexity. Rivalry between partners was only observed in the CCR case, where there are competitors among partners, and in that case, partners had to actively consider the repercussions of that situation. It seems though, that is not something that cannot be overcome.
On the contrary, almost every interviewee mentions a degree of complexity that slows down the process. However, interestingly when asked to whether this made the collaboration inefficient, they disagreed. All interviewees believed that – while costly and sometimes slow – this was the only or best or currently best way of achieving their goals. This similar sentiment was echoed across all three cases, emphasizing the pioneering phase the PPEs are (still) in, in a society that is not generally concerned with sustainable development. Any coordination cost is already assumed to be high, so when it actually is, it does not seem to lead to much inertia. Conflicting interests and mixed expectations also account for a good deal of inertia – though they were often hypothetical and had not caused large problems (so far).
The only time incompatibility comes up is between the SIF and the municipality. This is apparently the one type of inertia that is hard to overcome – this is the only time where inertia, rivalry or complexity have caused serious changes to the collaboration.

3. What collaborative advantages do partners of Dutch sustainable development ecosystems construct in the collaboration?

Collaborative advantages refer to ways in which a partner can use the collaboration to pursue their goals, either individual, organizational or collective goals.
Interviewees that mentioned their personal values or goals (it was only included in the conceptual framework after some interviews had already been executed), all were positive about what the foundations were doing.

They also all – some by themselves, some when probed – found it easy to relate their activities to collective goals, though the emphasis on other partners was less frequently observable than an emphasis on broader societal benefit.

The roles different organizations have towards this collective goal contrasted between cases. SCO is quite dissimilar to the other two in terms of collaborative advantages. Many of the people involved are trying to make SCO itself a success, rather than trying to use it in some way to fit to their own organizations' goals. All interviewees are actively and often involved with each other and the foundation, and because there is fewer partners, they might feel more responsible and are more heavily financially invested. So, on an individual level, they also feel part of SCO, which is not something partners would say about SIF or CCR. Collaboration goals are the goals of SCO itself, which they themselves work on – and so those are also top-of-mind. Organizational goals are harder to assess.

SIF aims to address employment and participation of people, including those who have a distance to the labor market. This issue is traditionally separate from businesses, and mostly a challenge for government. Corporates are thus exclusively part of a possible solution. Corporate partner EY can use its capabilities to address the societal issue at hand – they can help social enterprises and initiatives with their knowledge of business models or accounting (sifMM, lending SIF perfectly for a CSR (corporate social responsibility) initiative. In the case of CCR, the push for circularity is mainly an issue for the private sector. Large corporates are directly participating in the linear economy in an impactful way and might be part of the solution, but are, at least originally, part of the problem. They do not have the capability needed to address circularity. This makes CCR not so much a CSR cause, but a knowledgeable partner. It also attracts other organizations, that have experience with circularity and use CCR as a showcasing and networking platform. All this also means they have higher fees, and therefore can more actively manage and integrate their network than SIF could. SIF needs to market its services to outsiders, to be able to continually pay their own employees – as partner fees do not cover that. So, in terms of advantage, SIF partners have less direct benefits from the foundation towards their goals, but do feel they are contributing to societal goals, whereas partners of CCR pay a larger fee, get more valuable resources for their organization, and thus expect more on organizational benefits.

Interestingly, while all private partners stress the importance of organizational advantages (even their expectations of them differ per case), not all of them have found them to a satisfying degree. This is often attributed to the pioneering, hands-on mindset of the PPEs, where things are done, before they can be fully analyzed (e.g. sifRK, ccrMH, scoCA). During this explorative phase, relating the activities to a belief society is advanced and their own individual ideals are met, needs to be quite strong to avoid the collaboration falling apart completely in absence of clear organizational benefits.

Interviewees were wary of saying it in those terms, may be because it feels selfish to say so – but is it? Matching personal ideals and collaboration goals might bridge an initial lack of organizational benefit, but in the end, all three should be present for continued collaboration.

This inevitably brings the discussion back to the research question this research aimed to answer:

How is the structure of Dutch sustainable development ecosystems influencing interdependencies, and by extension the opposing forces of collaborative advantage and collaborative inertia between (public and private) partners?

Structure did not cause any observable vertical interdependencies of partners based on resource dependencies. Even dependence between partners and the foundation is not mutual, with the foundation is more dependent on its partners for survival, than the other way around. However, the foundation does provide access to valuable resources, many of whom directly or indirectly strengthen partners. What resources that are exactly differs per case, and is usually a mix of different resources, such as network or brokerage resources, knowledge and expertise, visibility, and legitimacy. An important resource found is innovative learning, exploration.

Access to these resources means a blossoming in different goals a partnership *could* address. In most partners, there were two or three levels of goals (individual, organizational, collective) that were being pursued through the partnership. A common factor appeared to be that in this partnership phase, it is easy to unite under a shared purpose, and those working towards this purpose tend to be highly motivated individually. However, it is hard to justify what exactly it contributes to organizational goals, especially to make this measurable – interviewees say it *could* work, but they are not sure whether that is happening to a satisfying degree. These doubts would be easier to remedy if partner organizations knew what others are planning to get out of it too. It could be frowned upon to prioritize organizational returns, however, if the individual and collective goals are agreed upon, why would you not try to improve it even further. If all three are being served, goal interdependency could be best way to ensure long-term commitment to the partnership. This way, insights into collaborative advantage opportunities and collaborative inertia pitfalls could in fact be influenced by network structure, as the research question asked – by assessing resources present and what else could be gained with those. It could also work the other way around, where analysis of both collaborative advantage and collaborative inertia shines a new light on this idea in relation to network structure. Letting available means (resource dependencies in network structure) inform possible organizational collaborative advantages. In this way, it is exactly the multi-faceted nature of the goal interdependency that can enhance the relevance of the partnership.

6.2 Limitations and Reflections

6.2.1 Limitations

As a species, like Darwin said, we should aim to collaborate and improvise as effectively as we can. Besides studying this phenomenon in the PPEs, this research itself is a good example of that as well. While many aspects to the research design and execution were considered beforehand, some limitations persist.

A first clear limitation is the selection bias in respondents. I was dependent on the central foundations, who provided me with contacts of their partners. But as a condition, they wanted to choose who I talked to. This means that the respondents are likely the most positive about, or those with the best relationship to, the central foundation. Furthermore, it meant that the interviewees differed in what level they are in the organization, and whether their involvement is supervisory, advisory, or operational. This makes it difficult to pinpoint exact differences between partners. However, in all cases the interviewee was someone who was very familiar with the foundation and the collaboration. While I think the different levels are unlikely to have a substantial effect on the result, the selection bias might have had an influence. Specifically, in relation to the concepts on collaborative advantage and collaborative inertia, it would have provided me with a more nuanced picture to interview dissenting voices within the network, or partners that had recently dropped out of the PPE. It can therefore be assumed that some results in the collaborative advantage and inertia findings are slightly more positive in this sample than in the overall network.

Second, there is some inconsistencies in the data from the actual interviews. I had a topic list, but during the interviews some of my operationalization shifted, so the last interviewees were asked things that the first were not. This is in particular true for collaborative advantage towards individual's goals, which was not discussed (at least explicitly) in the first few interviews, as well as the operationalization of inertia, which did not include rivalry/conflicting interest probes at first, only complexity probes. The collaborative inertia concept may therefore be less fleshed out than the others, with less construct validity than ideal. However, because the earlier interviews include all three cases, as do the later interviews, between the cases it should not have an effect.

Finally, the interviews were done in a conversational, semi-structured style, which allowed respondents to, for example, take a question about benefits of the partnership in any direction they wanted. I did not ask everyone: how much money do you give [PPE], how much information do you give, versus what you receive etc. I think the fact that all answers still fit the conceptual framework, shows some construct validity. However, reliability might be lower in these types of interviews, as it relies very much on the respondents' 'top of mind' ideas.

6.2.2 Reflection on the role of the researcher

For this research it is important to reflect on the role of the researcher. During the data gathering period, I was doing an internship at one of the partners of each foundation, namely Kirkman Company. but I spend around three days a week doing supporting tasks for KC, and often had discussions on the

content of my research with consultants there. I will also be sharing the results with them. I tried to stress at the beginning of all interviews that the research was being carried out independently from them. Despite this disclaimer, I did refer to people and things about the foundation. This way, I tried to seem informed somewhat, so that the basics did not need to be explained. First, because I wanted them to see me as a well-informed conversational partner, and secondly because I usually only had a half hour to ask them my questions. Consequently, I was sometimes treated as a representative of KC. As I was interviewing KC consultants, they generally referred to the company as 'we', sometimes explicitly including me in that 'we'. This did not only happen with people from KC. In my interview at Pension fund 1's office, for example, KC was continually referred to as 'you', albeit plural ('jullie'). This made me feel slightly uneasy – especially when discussing the financial details of the agreement between KC, Pension fund 1 and SCO. Other times, I heard myself defending the foundation, against accusations of being greedy, secretly having different intentions, or any other vaguely implied claims. The whole interviewing process was far more complicated and political than I – perhaps naively – had assumed. It was very important to talk to the right person first, let them decide who to invite, contact respondents first introducing me, then me introducing myself again. Then, during the interview, there were times when certain topics suddenly proved sensitive, evoking a strong reaction I had not anticipated. In the end though, I believe each interview was useful, and provided some unique insights into the partnership dynamics.

All in all, I think the results I eventually gathered, are different than if someone, not related in any way to KC, would have interviewed the same people. Perhaps to an outsider, there would be less social desirability bias, because the results are then less likely to end up with people they still need to work with. Then again, such an outsider may not have gotten the access that I had. Also, I do think it provided me with some credibility and a degree of trust from respondents – if I would misrepresent what they said as something bad about the PPE, that could also negatively KC and as a KC intern, they may have felt that would be less likely. I think in the end there was no way to eliminate this factor, despite my efforts to neutralize it as best as I could.

6.3 Theoretical reflections and contributions

This research attempted to integrate theories on resource interdependencies and goal interdependencies, as a way of linking network structure to the outcome of the collaboration, both in positive advantages and negative inertia. It has done so by using both policy network theory by Marsh & Rhodes (1992) and collaborative advantage theory by Huxham & Vangen (2000). I would say this attempt was a fruitful first try. It yields some interesting perspectives, to look at a public-private collaboration both from a more classical policy studies perspective and a more contemporary theory which applies to public and private organizations. Marsh and Rhodes' work is very structure oriented, which may downplay agency and interpersonal relations. On the other hand, Huxham and Vangen

emphasize specifically the large degree of variation as a result of agency when it comes to, for example, setting meta-strategies. They assume that any meta-strategy will need to be broad and vague enough for everyone to formally agree to it, and that it is impossible and probably better if everyone specific understanding of it remains implicit. I think infusing an slightly more agency-aware theory into the structure heavy theory gives an overall more balanced exploration of the cases.

Furthermore, Huxham sees the concepts of collaborative inertia and collaborative advantage as useful tools *in* the process. Participants will have a framework for their experience, not in the last place because the theory was formed very inductively, from years of practice. This, I believe, also contrasted nicely with Marsh & Rhodes' more carefully descriptive theories based on 'hindsight' analysis.This lends itself for assessing current structures and how they came to be, but perhaps not as well for the possible outcomes or change in the future, which the collaborative advantage concept does embody.

6.4 Practical recommendations

These findings can be very valuable to practitioners involved with setting up, and especially maintaining, larger partnerships between both public and private actors. A thorough understanding of (shifting) interdependencies towards different levels of implicit and explicit goals is hard to grasp, but very important in fending off collaborative inertia.

It is also important to understand that good intentions are often not enough to justify spending money and time on a collaboration. Mostly for private organizations, but public ones too, it is important that besides individual and shared aims, there are benefits on an organizational level too. In fact, the three should be balanced for ideal collaborative advantage. It should therefore not be something that is looked down upon to want to gain *something* as an organization. It should be out in the open what others have that can help you, what you have that can help others *and* what you together can do for society at large. This seems key to actually maintaining the collaboration in a healthy way.

6.5 Future research

Future research could build upon this explorative research, perhaps with more quantitative network analyses, which could more accurately map what resource and goal dependencies partners construct in a larger network. This could also be a useful tool, when assessing struggling partnerships, to see where people perceive bottlenecks to be. While this research provides in-depth insights, a more quantitative research could synthesize these connections, perhaps even in one visual result. Boiling all a partnership's complexity down to a single or a few images, could potentially be helpful for those involved.

Second, it would be interesting to approach this topic with a more longitudinal research design, where the shifting partners, expectations, activities etc could be mapped over time. This might reveal whether the conclusions of this research – which, at the end of the day, aims to prolong and strengthen partnerships, are actually playing out in the predicted way.

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Appendixes

Appendix 1: List of abbreviations

BSSC	Brightlands Smart Services Campus; located in Heerlen *Location of SCO*
CCR	C-Creators *One of the three researched public-private ecosystems*
KC	Kirkman Company; transformation consultancy located in Baarn. *Location of research, one of the interviewed partners of SIF, CCR and SCO*
PPE	Public-Private Ecosystem *Concept being researched, refers to a collaborative network of public and private actors around a certain sustainable development issue.*
SCO	Smart Climate Opportunities *One of the three researched public-private ecosystems*
SEI	Social Entrepreneurship Initiative *As part of Utrecht University, one of the interviewed partners of SIF*
SIF	Social Impact Factory *One of the three researched public-private ecosystems*

Appendix 2: List of interviewees

Case	Interviewee name	Organization	Job title	Outcome/Date Interviewed	Referred to as
SIF	Sjoerd van der Maaden	SpecialiSterren	Founder, CEO	15 May 2019	sifSM
	Rebecca Scholten	EY	Corporate Responsibility Lead	Suggested Matthias	
	Matthias Maltha	EY	Coordinator Corporate Responsibility - Impact Measurement	16 May 2019	sifMM
	Harry Hummels	Utrecht University	Professor; Chair Social Entrepreneurship	27 May 2019	sifHH
	Bas Stam	Municipality of Utrecht	Head Jobs and Income	Suggested Daphne	
	Daphne van Rhee	Municipality of Utrecht	Policy advisor Social entrepreneurship	29 May 2019	sifDR
	Roy Klaassen	Kirkman Company	Managing Partner	3 June 2019	sifRK
	Monique Hoed	Social Impact Factory	Community manager	24 June 2019	sifMH
CCR	Martijn Horsman	Schiphol Group	Member of Task Force Circular Economy	10 May 2019	ccrMH
	Lizan Hegeman	BPD	Location Manager	14 May 2019	ccrLH
	Wouter van Twillert	Kirkman Company	Practicelead PPE, C-Creator	23 May 2019	ccrWT
	Jasper Flapper	Antea Group	Circular & Best Value Consultant	4 June 2019	ccrJF
	Ron Leegwater	Rabobank Regio Schiphol	External Communications Specialist	Suggested Ingrid	
	Ingrid Ris	Rabobank Regio Schiphol	Assistant Accountmanager MKB	Suggested Ard	
	Ard van Berkel	Rabobank Regio Schiphol	Director Private Clients	20 June 2019	ccrAB
	Fanauw Hoppe	AT Lawyers	Strategic counsel & Attorney	Rejected	
	Sofie Snoek	C-Creators	C-Creator	31 August 2019	ccrSS
SCO	Ruud Koornstra	Smart Climate Opportunities	Chairman	13 May 2019	scoRK
	Chris Veerkamp	APG	Innovation Manager at APG Groeifabriek	16 May 2019	scoCV
	Cas van Arendonk	Kirkman Company	Founding partner	27 May 2019	scoCA
	Elmer de Boer	Eneco	Manager Ideation at Eneco Innovations & Ventures	Rejected invitation	
	Gert-Jan Sikking	PGGM	Senior Advisor Responsible Investment	7 June 2019	scoGS
	Pieter Custers	Techruption	Head of Techruption	Rejected invitation	

Appendix 3: Operationalization into interview questions

Central concept	Conceptual dimensions	Operational dimensions	Sensitizing concepts	Question
Network structure	Resources	Financial	Contributions Gains	What about [PPE] makes it valuable for your organization to be involved? What exactly is to be gained from this collaboration? What would be missed if you were not involved with [PPE]? How do you use your involvement with [PPE], internally as well as in external communications?
		Informational	Knowledge Expertise	
		Political	Influence Legitimacy / Credibility	
		Organizational	Network/ brokerage Visibility / platform Products/ services/ infrastructure	
	Integration	Frequency of contact	High Low	How much is that happening? Do you mostly interact with the foundation, or also with other partners? Is it just something that you do, or do your colleagues work with [PPE] as well? Do you see [PPE] as an extension of your own organization? Does it further your interests elsewhere?
		Quality of contact	High Low	
		Stability of contact	Stable Fluctuating	
	Resource distribution	Resource location	All have valuable resources Some have valuable resources	Do you think you strengthen each other equally?
		Resource access	Exchange-based access Consultative access	*Implicit in how the partnership is structured*
Collaborative advantages	Collaborative advantages for own goals	Used for individual goals	Fit with values/ideology Fit with career/ job wishes	Why are you personally involved with [PPE]?
	Collaborative advantages for	Used for operational goals	Sales/Acquisition,	Can [PPE] help you attract new customers?

	organizational goals		Positioning in the market (comm), Value creation for customers (execution)	Can [PPE] help you serve current customers in a better, more complete, faster etc way?
		Used for aspirational goals	Fits overall mission Fits subgoal(s)	Does [PPE] help you bring to life your organization's mission and vision, as it relates to sustainable development? Does [PPE] help you to achieve your mission in a sustainable way? Why is your organization involved with this topic? Do you think they should?
	Collaborative advantages for collective goals	There is a meta mission		To what extent are your organization and [PPE] working towards a shared goal? Are you trying to establish something beyond your own organization's benefit?
		There are meta objectives	Assigned roles Milestones	How are you working towards that? Who does what?
Collaborative inertia	Inertia experienced	Complexity Rivalry	Dominance Competition Mixed aims and intentions Coordination costs Conflicting interests Incompatibility	While it is easy to agree on societal goals or shared missions, have you ever noticed conflict of interest in your collaboration? What were they?
	Inertia – advantage trade-off		Inefficiency/ Efficiency	Looking at all the time, effort, money etc your organization puts into [PPE], is it worth it? Is this an efficient way of organizing? Of reaching goals?