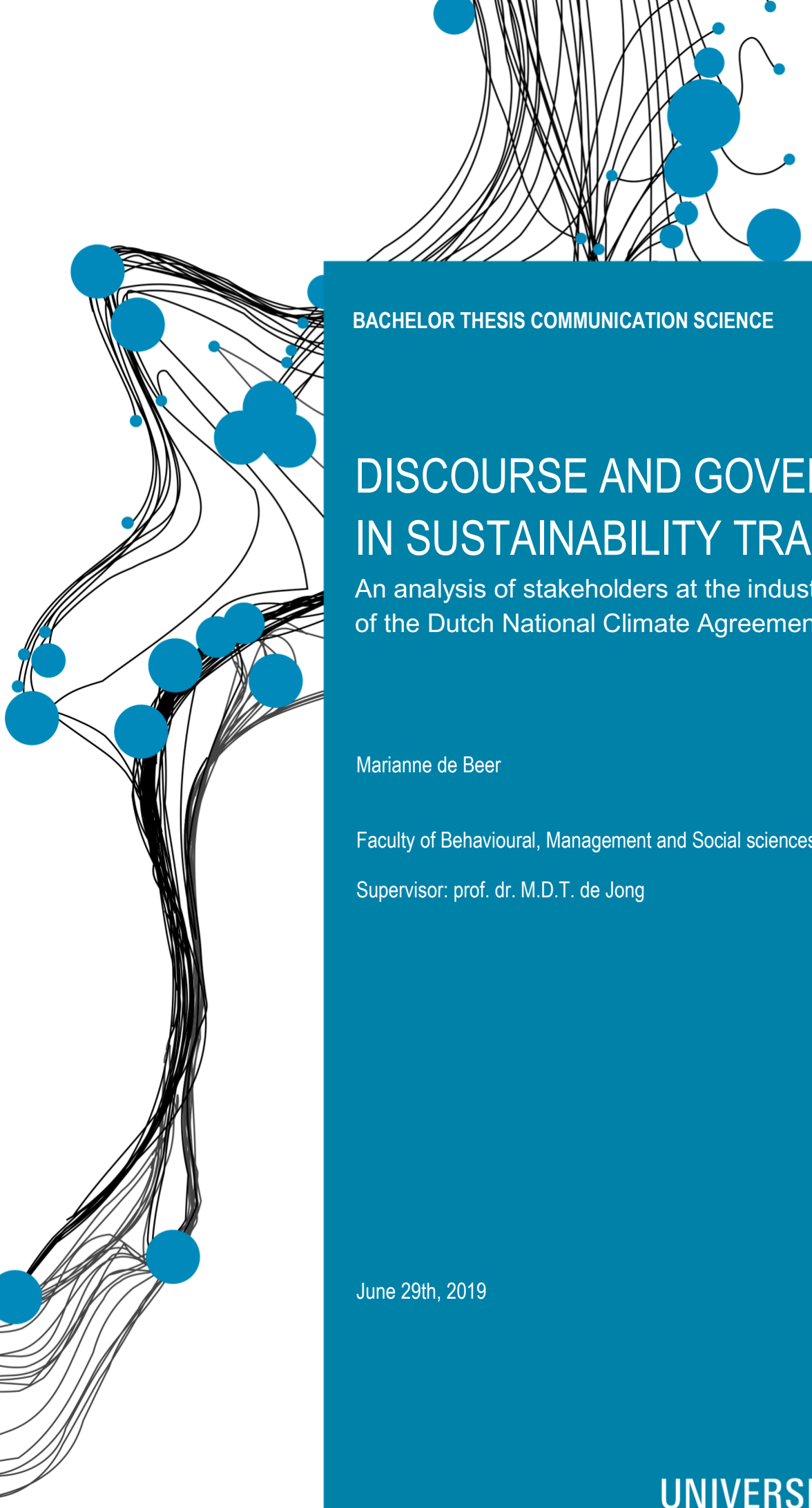

BACHELOR THESIS COMMUNICATION SCIENCE

DISCOURSE AND GOVERNANCE IN SUSTAINABILITY TRANSITIONS

An analysis of stakeholders at the industrial sector table of the Dutch National Climate Agreement

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Abstract

Background: To reach its goal of reducing the Netherlands' greenhouse gas emissions by 49% by 2030 and set a sustainability transition into motion, the Dutch government set up a governance process towards the National Climate Agreement. This policy-making process requires cooperation between a range of actors with different perspectives on the solutions and changes needed to confront sustainability challenges. Previous research into environmental policy has shown that the way people speak about and define environmental policy problems are decisive for the outcomes of such policies.
Purpose: This study aims to analyze the discourses that are part of the industrial sector table of the agreement, focusing on how stakeholders communicated about the agreement and whether this changed throughout the negotiations. Additionally, this study asks how the involved stakeholders look back at the negotiation process and what role polarization and politicization played in it.
Methods: Qualitative content analysis of stakeholder documents and a number of semi-structured interviews with industrial sector and environmental organization actors.
Conclusions: Stakeholder groups form discourse coalitions to align the language and communicative strategies they use to relate to environmental policy problems. The overlapping statements and stories between the two stakeholder groups indicate a dominant discourse on the Dutch sustainability transition. Minor developments in the discourses can be linked to stakeholders' responses to changes in the public debate on the transition. Furthermore, it is hypothesized that inefficient governance of the negotiation process hampered the stakeholders in coming to an agreement. Polarization and politicization of the debate may have made consensus between the parties even more difficult.
Practical recommendations: The government should take the stakeholders' criticism on the negotiation process into account in future efforts to manage the transition. Journalists could promote a more informed debate by accurately presenting the complexity of the transition to the public.

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1. Introduction

With the adoption of the Paris Agreement as the new international climate policy agreement for the post-2020 period (UNFCCC, 2015), the year 2015 marked a starting point for countries to formulate and achieve their own targets and commitments to combat climate change (Rogelj et al., 2016). Each member state is required to put forward how, and how much they are willing to reduce their greenhouse gas (GHG) emissions; these are their 'nationally determined contributions'(NDCs). The European Union's- and thus the Dutch NDC comprises the collective target to reduce GHG emissions by at least 40% by the year 2030 compared to 1990 levels (Latvian Presidency of the Council of the European Union, 2015).

To reach this target, the Dutch government formulated an ambitious climate and energy agenda in their 2017 coalition agreement. In this agreement, they set the goal to reduce Dutch GHG emissions by 49% by 2030. In doing so, the government aims to give Dutch citizens and companies more certainty about the climate goals. To achieve the central goal of reducing GHG emissions, a consultation process for a National Climate Agreement (NCA) was launched by the Ministry of Economic Affairs (EA). In this policy-making process, affected parties from private, societal and public organizations can formulate climate policy measures (Ottens & Edelenbos, 2019). The negotiations took place across five "sub-tables", divided by sector: built environment, industry, agriculture and land use, mobility, and electricity. The electricity and industry sector have to bring about most of the CO_2 reduction, with the industry sector having to realize more than a third (14.3 million tons) of the total reduction in 2030. These reduction goals require companies to make difficult decisions, that can affect their competitiveness and the quality of life of citizens (Nijpels, 2018). Involving all relevant parties from each sector can help create societal support for concrete climate measures that will change many individuals' everyday lives.

In December 2018, after nine months of negotiations, a report outlining possible measures per sector was published. The environmental organizations involved in the NCA, however, decided not to sign it as they did not find the measures "ambitious enough". Their main criticism was directed towards the industry 'table', stating that corporations should be held more strictly accountable for their environmental impact (Straver, 2018). Additionally, calculations published by the PBL Netherlands Environmental Assessment Agency showed that the first proposal for policies is unlikely to be sufficient in reaching the 49% GHG reduction target that the Dutch government set. The measures delivered by the industry sector were not sufficient to obtain the required CO_2 reductions, calling for more concrete and strict measures, such as a CO_2 tax (PBL, 2019). Before a final agreement can be reached, the government has to further negotiate with the involved parties to effect a final and signed agreement, which is expected to be presented by the end of June 2019 (Rijksoverheid, 2019).

The core emission reduction objective of the NCA requires solutions to sustainability challenges in the five sectors. These sectors are often dependent on each other, as well as on technologies, organizational structures and existing policies (Markard, Raven, & Truffer, 2012). This makes it difficult for sectors to make drastic changes in their production processes and resource usage, resulting in slow, incremental changes that will not be sufficient to reach the Netherlands' ambitious reduction goals. For this reason, the NCA aims to promote a fundamental transformation to more sustainable ways of production and consumption. This notion of a so-called 'sustainability transition' has been firmly rooted in Dutch policies on the energy system, which was one of the first where a new governance approach to sustainability — called 'transition management' (Loorbach, 2007) — was applied (e.g. Kern & Smith, 2008). The Dutch governments' interest in sustainability transitions stems from its viewpoint that issues like climate change, overexploitation of resources, biodiversity loss and other structural problems require a fundamental change in existing systems and policies. The Ministry of EA became one of the main advocates of transition management, one of the

main reasons being that the approach offered opportunities for economic innovation and public-private cooperation. The Ministry of EA hoped to create a sustainable energy system for businesses, to make the Netherlands an appealing location for innovative companies. In order to realize the innovations that lead to such a system, a long-term approach involving many stakeholders was required (Loorbach, 2007).

The transition management approach was developed by Rotmans, Kemp and others. A transition is a "long-term process of change, during which a society or subsystem of a society fundamentally changes" (Loorbach & Rotmans, 2006, p. 188). These fundamental changes occur in different sectors and on different levels of society, for example in organizations, institutions and politics, but also in the economy and the technologies that are produced. The sectors that are part of the transition, such as energy supply or transportation, are called 'socio-technical systems'. These consist of actors, like citizens, companies and organizations, and institutions, such as regulations and technical norms. These different societal actors are highly dependent on each other, and thus need each other when they want to change the socio-technical system (Markard et al., 2012). Thus, a transition can be seen as a process of fundamental societal change from one stable system state to another, which occurs in all sectors, organizations and institutions that are part of or dependent on the system. With the many actors and sectors involved, managing this process can be a challenge.

Sustainability transitions are complex processes, with a variety of driving forces that cause changes on different societal levels (Loorbach, 2007). They require cooperation between actors with different perspectives on problems and solutions (Loorbach, 2010). The multilevel perspective is as a framework that is often used to analyze how transitions occur and what patterns, events and actors are important in them (Geels, 2002). This framework looks at transitions from three levels: the socio-technical landscape, regimes, and niches (Kemp, 2010). The regime is the existing, dominant social and economic system, which companies and technologies are a part of (Rip & Kemp, 1988). A regime contains a group of stakeholders such as corporations, politicians, NGOs or citizens. This group of social actors shares a set of formal and informal rules to determine their actions as well as a vision or plan for the future (Hermans, Horlings, Beers, & Mommaas, 2010). Transitions are regime shifts, making the factors that change and influence existing regimes of special interest, as these can give governments insights into how to manage transitions towards sustainability.

Regimes can be put under pressure by elements and events that occur in the socio-technical landscape. This level consists of material elements, such as infrastructure, as well as immaterial elements: political culture and coalitions, social values or worldviews (Kemp, 2010). Additionally, the regime may be challenged by developments at the niche level, where alternative -often radical- technologies and systems are established (Geels, 2002; Kemp, 2010). Thus, sustainability transitions occur when groups of societal actors face challenges from different levels of society, for example when new technologies are promoted or when the political and public debate calls for radical change.

Despite the policy objectives and ambitious efforts towards the sustainability transition, the Netherlands is still lagging behind on other EU countries. Although the share of renewable energy consumption increased to 6.6% in 2017 (CBS, 2018), this is still far lower than the total share of 17% of the EU-28 (Eurostat, 2018). Earlier literature on the Dutch sustainability transition states that the main explanation for this can be found in a strong "fossil fuel regime", in which corporate and multinational stakeholders are dominant in the policy-making process (Kern & Smith, 2008; Van der Loo & Loorbach, 2012). Thus, a sustainability transition would require these regimes to change or destabilize as a result of external pressures from, for example, civil society groups or technological innovations (Smith & Raven, 2012). However, regimes can also play an important role in the radical change required for transitions, calling for a more refined understanding of regime actors and their interaction with niches (Loorbach & Verbong, 2012). Both the corporate and multinational stakeholders – who can be classified as part of the regime–, as well as the NGOs representing civil society, and thereby the niche of the system, were part of the negotiations towards the NCA. As such,

these parties provide a relevant case for analysis of how regime and niche actors act and communicate within a sustainability transition.

This paper aims to study the different stakeholders involved in the Dutch sustainability transition, taking the case of the National Climate Agreement as a process that represents the governance approach to transition management. The main units of analysis are the industrial sector and the environmental organization stakeholders who participated in the negotiations. The latter mostly represent actors that are at the niche level of the transition and thus crucial for the fundamental changes required. The ambitious goals set by the industrial sector may have implied that all actors involved are serious about taking drastic sustainability measures. The insufficiency of the proposed measures, however, raises the question of how and whether stakeholders' stance towards the radical change required for a sustainability transition has evolved. Therefore, the aim of this study is to gain a better understanding of what discourses are present amongst these two stakeholder groups at the industry table and to what extent these have changed throughout the negotiations. In addition to this, the current study aims to provide a first insight into how the stakeholders involved experienced the process towards the agreement, and what role they think polarization and politicization of the debate played in this process.

To reach these objectives, the main research questions are: (1) *What major discourses and storylines are present amongst the industrial sector and environmental organization stakeholders in the Dutch National Climate Agreement?,* (2) *To what extent have these discourses and storylines changed throughout the negotiation process?,* (3) *How do the industrial sector and environmental organization stakeholders look back at the process towards the NCA and the role of polarization and politicization in this process?*

The outcomes of the National Climate Agreement will determine the measures taken by the Dutch government to operationalize the sustainability transition. Not only do these measures need wide societal support, but they also have to fundamentally change the way the Netherlands uses, produces and consumes resources. Only then can the country meet its ambitious emission reduction goals and contribute sufficiently to the global efforts to combat climate change. Studying discourses allows for the identification of how diverse actors are trying to influence the definition of a problem. Therefore, this approach is especially relevant for the study of environmental policy processes such as the NCA, which often involve a range of stakeholders with different ideas and objectives (Hajer & Versteeg, 2005).

Earlier analyses of policy discourses and narratives have shown that ideas and conceptualizations of environmental policy problems are decisive for the outcomes of such policies (Leipprand, Flachsland & Pahle, 2017). In this way, the identification of discourses predicts the outcomes of policy processes, because they often determine what can and cannot be discussed and what policy options are viable (Litfin, as cited in Hajer & Versteeg, 2005). The discourses present amongst the industrial sector and environmental organization stakeholders represent how they view and communicate about the environmental problems we are facing and how these should be solved. These ideas and conceptualizations are important for the outcomes of the NCA. Thus, this research contributes improved understanding of policy-making processes for sustainability transitions, by showing how different stakeholder groups try to influence the definition of the climate problem and, thereby, the outcomes of policy-making processes. This, as well as investigation of how the actors look back at the negotiation process, provides insights that the Dutch government could use to improve the management of future processes that involve diverse stakeholders.

Furthermore, Bosman, Loorbach, Frantzeskaki and Pistorius (2014) found that tensions and shifts in stories and discourses can indicate a change in coalitions and power relations at the regime level. Identifying these changes can help uncover the elements and events that caused developments in the NCA. This adds to the theoretical knowledge on what causes changes in regimes, and thus in the core of the sustainability transition. Answering this question can also provide new insights for the

approach governments should take to offset sustainability transitions. Finally, by paying attention to the role of polarization in the negotiation process, this study can have practical implications for journalists who cover the news stories related to the NCA and the sustainability transition.

This paper consists of five chapters. The current chapter has already introduced the background, problem setting, and goal of the current study into the Dutch National Climate Agreement. Chapter 2 contains a review of the relevant transition and communication literature, conceptualizing the role of discourses and actors in transitions. Subsequently, chapter 3 provides a description of the method and instruments used in this study. Chapter 4 then examines and describes the results of this study. Finally, chapter 5 consists of a discussion of the most relevant findings, the limitations of this study, its implications for theory and practice, suggestions for further research and the main conclusion of the study.

2. Theoretical framework

This chapter is divided into two sections, which both explore different areas of transition management- and communication theory that are relevant when studying the discourses and storylines utilized by the industrial sector and environmental organization stakeholders in the National Climate Agreement. The first section discusses relevant concepts from transition theory, allowing for initial conclusions about the process of negotiation in the agreement and the importance of the stakeholders that will be studied. Consecutively, the second section adds theories and concepts from a communications perspective, finally discussing the concepts of discourse and storylines and linking these to the transition management theory discussed in the first section.

2.1 Transition management theory and concepts

This section starts by exploring the literature on policy-making and governing in transitions, as these processes are similar to that of the NCA. Subsequently, a more in-depth description of the role of stakeholder groups in transitions is provided, drawing on the multilevel perspective on transitions. The focus is then laid on the industrial sector and environmental organization stakeholders, exploring their role in the sustainability transition by elaborating what level of the transition they are part of. Finally, this section takes an in-depth look at how industrial sector stakeholders approach and influence environmental policy-making processes.

2.1.1 Interactive decision making

The approach taken by the Dutch government to develop the NCA and to manage the sustainability transition has been identified as interactive decision making and is a good example of the so-called Dutch polder model. The goal of this consensual approach is to gain public support for policies by involving a wide variety of stakeholders in the governance process (Loorbach, 2007). It is stated that the strengths of the polder-model lie in "the capacity to adapt to changing circumstances and formulate consensus based-solutions in times of crises" (Loorbach, 2007, p. 88). According to governance theorists, actors involved in policymaking often have divergent perspectives on the problem they aim to solve, and thus on the solutions and policies required. As a result, actors' interests often clash and might even block decision making. Therefore, governments have to find creative ways to manage the complexity of the decision making process (Edelenbos & Klijn, 2006). Interactive decision-making is one such way.

According to Edelenbos (1999), interactive governance develops policies by involving citizens, social organizations, corporations and other stakeholders from the beginning of the policy-making process. The procedure aims to take the values and wishes of the stakeholders involved into account when developing solutions. Therefore, parties are truly involved in the writing of policy proposals, whereas traditional public policy procedures only allowed this type of involvement once the proposal had already been developed (Edelenbos & Klijn, 2006). In this process, the task of the government is to map out the problems and the answers to these problems through dialogue with affected stakeholder groups (Edelenbos, 1999), providing a way to deal with interdependencies in complex policy-making processes (Edelenbos & Klijn, 2006). This participatory and interactive approach to governance is especially prevalent in the management of sustainability transitions. According to Loorbach and Rotmans (2006) "the vital element for developing policy on environmental issues is not the actual decision-making as much as the forging of the participatory frameworks that will lead to policy results" (p. 211). Vital components of the transition such as public support and novel environmental technologies can be stimulated by involving actors from various levels of the transition. For this reason, the stakeholders involved in the NCA can be conceptualized as part of the transition, as they are involved in an interactive, participatory policy-making process. Analyzing and

distinguishing the relevance of these actors in the transition, however, requires a more in-depth look at the transition management literature.

2.1.2 Actors in transitions and the multilevel perspective

As the Ministry of EA is a strong advocate of transition management and has taken this approach to effect the sustainability transition, it is important to consider the literature available on this approach as a basis when studying the actors involved in the NCA. In transition management, the multilevel perspective on transitions (MLP) is commonly utilized to distinguish relevant actors for participatory processes. These actors can be classified as being part of either the niche, regime or landscape level. Geels (2002) explains transitions as dynamic interactions between these three levels and thus between three different types of actors. Based on how these levels relate to and pressure each other, transitions can evolve in different ways. In addition to this, sustainability transitions are often very value-laden and political. According to Geels & Verhees (2011), this causes actors to hold varying interpretations of environmental and sustainability problems, resulting in disagreement about which directions sustainability transitions should take and at what pace they should be effected.

According to Smith, Stirling and Berkhout (2005), whether actors are "inside" or "outside" of the incumbent regime is key in understanding and analyzing their influence on transitions. Loorbach and Rotmans (2010) define a regime as "a dominant set of structure, culture and practices" (p. 110). The regime is the existing, dominant social and economic system, in which companies and technologies are embedded (Rip & Kemp, 1988). A regime contains a coalition of stakeholders such as corporations, politicians, NGOs or citizens. This group of actors shares a set of formal and informal regulations to determine their actions as well as a vision or plan for the future (Hermans, Horlings, Beers, & Mommaas, 2010). There is, however, no straightforward way to distinguish "core regime members" from "non-core members" (Smith et al., 2005).

Niches are essential in the emergence of new technologies for sustainability transitions, as they offer a space where radical ideas can flourish without the involvement of the existing regime (Kemp, Schot, & Hoogma, 1998). Niche actors distribute their ideas and aim for them to be taken on by the incumbent regime (Fischer & Newig, 2016). At the niche-level, actors can be "individuals or small groups of actors, with local practices which differ from the regime" (Bergman et al., 2008, p. 3). According to Fischer and Newig (2016), niche actors are very dependent on decisions made by the government and to what extent they involve innovative ideas in the policy-making process. Transition management theorists put a lot of emphasis on the importance of these 'frontrunners', who have a certain amount of distance to the existing regime and are visionary, creative individuals (Wittmayer, Avelino, van Steenbergen, & Loorbach, 2016).

To effect a transition, a shift from the incumbent regime to a new, alternative regime is required. According to Loorbach and Rotmans (2010), a regime shift is often the result of a combination of pressures from the outside, as well as tensions within the system and the availability of radical and mature alternatives to the system. Ceschin (2013) confirms this, stating that niche actors are essential to initiate radical innovation in transition processes. Despite this, a continuous link with the actors of the regime is still very important for the transition process (Loorbach & Rotmans, 2010). In the early stages of a sustainability transition, the existing regime often tries to prevent radical developments from happening. They will first aim to improve the technologies already in place and will strategically deter innovations. Once the developments are in a further stage and new technologies have emerged, however, the regime can help enable it using large amounts of capital and organizational power (Rotmans, Kemp, & Van Asselt, 2001).

The final transition level is that of the landscape. This level consists of social values, political cultures, built environment, as well as economic development (Loorbach, 2007). At this level, it is more challenging to define actors. The landscape can be defined as "the environment external to the regime" (Coenen, Benneworth, & Truffer, 2012, p. 971). There are no activities within this level, as it

"provides no room for agency; actors can only respond to it" (Raven, Schot, & Berkhout, 2012, p. 67). Although actors have no direct influence on the landscape level, knowledge of the landscapes' characteristics can be valuable to understand the role of other actors (Fischer & Newig, 2016). Additionally, some scholars even suggest that the landscape itself is an important source of change (e.g. Geels, 2010). Thus, the relevance and role of actors in transitions can be identified according to the transition level they are in. For this reason, it is important to determine what transition level the industrial companies and environmental organizations are situated in, and what implications this has for the role they play in the negotiations for the Climate Agreement.

2.1.3 Government and industry actors in sustainability transitions

As the previous section showed, transition levels are relevant identifiers for the role of the stakeholders that are part of the NCA and that are the focus of the present study. Hence, it is appropriate to distinguish the transition levels on which the industrial sector and the environmental organization stakeholders are situated. Actors who are part of the governance process are generally divided into state (government), private sector (business) and civil society actors (Grin, Rotmans, & Schot, 2011). According to Fischer and Newig (2016), policy-making in the transition process is highly complex and requires governments to create opportunities and room for niche actors to influence the incumbent regime. This is not an easy task, as governments should support innovators without unequally treating other actors (Loorbach, Van der Brugge, & Taanman, 2008). In addition to this, policymakers depend on the general public for re-election, thus relying on economic factors such as job availability and market growth. This can cause the government to be dependent on and favor the wishes of the industrial sector, even if alternatives would benefit the public good (Geels, 2012). This is confirmed by Geels (2014a), who states that policymakers and incumbent market actors "tend to form close alliances because of mutual dependencies" (p. 26). Although the government has an important role to play in the management of transitions and the development of niches, the actual regime changes mostly depend on business and civil society actors.

Market actors can be either part of a niche or of the incumbent regime. This classification depends on how businesses perceive the various risks within the dominant system (Foxon, Hammond, & Pearson, 2010), as well as on how much pressure is put on them by the government or consumers (Farla, Markard, Raven, & Coenen, 2012). In some cases, businesses play an active role in the development of innovations, showing that their strategies for development can be long-term oriented (Farla, et al., 2012). Additionally, Bidmon and Knab (2018) described the link between business models and their influence on sustainability transitions. The transition towards sustainable development requires a systemic change of the current processes of production and consumption, and business models have great potential of advancing such changes. In contrast, firms that are part of the incumbent regime can be less driven to innovate and will only do so when pressured by other actors (Penna & Geels, 2012).

Thus, it can be concluded that most of the industrial sector stakeholders can be classified as 'regime actors', as they are an important part of the negotiations and thus feel pressure from the government to play a role in the transition. They will either be part of the incumbent or the niche regime, depending on their willingness to innovate. It can be expected that the government will tend to agree with the industry actors, as these companies have a large amount of influence on jobs and on the economic viability of the sustainability transition. In contrast, environmental organizations exert a smaller amount of influence on the government. They do, however, play an important part in representing the wellbeing and voice of civil society, causing the government to find them relevant and important in the discussion around the Dutch sustainability transition.

2.1.4 The greening of industry

With the industrial sector stakeholders being one of the most influential regime actors in the sustainability transition, and thus in the negotiations around the NCA, it is imperative to acquire a more in-depth look at how these corporations approach policy-making processes. Empirical knowledge of the 'greening of industry' provides further relevant insights for the role of these corporations in sustainability transitions. Penna and Geels (2012) approach this topic by looking at industrial actors, their perceptions, strategies, resources and actions. They suggest that the interaction between external pressures and internal responses drives the process of 'green' or sustainability transitions. Geels (2014b) divides organizations into two environments: the (economic) task environment and the institutional environment. In this approach, the task environment consists of industry firms who engage in economic activities. Here, they face the five competitive forces first conceptualized by Porter (1980). These are novel market entrants, substitutes, rivalry among competitors as well as the bargaining power of buyers and suppliers (Porter, 1980). In contrast, actors in the institutional environment aim and compete for legitimacy and social acceptance. These emerge from compliance with cultural beliefs, social values, and political pressures. The institutional environment contains actors such as policy-makers, the general public and social movements (Penna & Geels, 2012).

Additionally, businesses are part of 'industry regimes'. These industry-specific institutions act as mediators for organizations' outward actions. Geels (2014b) states that industry regimes contain a set of deep structural elements, such as technical knowledge, identity, beliefs and cognitive frames as well as formal policies and regulations. These regime elements are then utilized by firms to interact with the aforementioned task and institutional environments (Penna & Geels, 2012). Within the policy making and compliance process, relevant approaches for firms to shape the institutional environment are political strategies, which are used to cope with external pressures and influence the environment. Moreover, Geels (2014a) identified three ways in which corporations influence policymakers. First of all, the interdependency of firms and policymakers leads to close relations between them, which gives industries direct access to policies. This close contact can cause a second, more subtle way of influence, namely the internalization of ideas and interests of industries by policymakers. According to Lindblom (2001), market and governmental actors mostly agree about the definitions of problems and solutions in the governance process. Thirdly, industry actors utilize 'corporate political strategies' to influence the policy-making process (Hillman & Hitt, 1999).

According to Hillman and Hitt (1999), this corporate political behavior can be reactive, in the form of passive reaction or positive anticipation. In contrast, firms that take an active, participatory approach are said to engage in public policy shaping, aiming for specific political objectives (Weidenbaum, 1980). Here, corporations can take a number of different strategies and approaches, depending on their objectives and resources. Such strategies include lobbying, financial aid to political parties, legal action, pressure strategies, information strategies and non-compliance strategies (Hillman & Hitt, 1999). These strategies are utilized by industry actors once public concern over an environmental issue causes policy-makers to further investigate it. In order to influence the debate surrounding the issue, firms will, for example, address the technical challenges or high costs of proposed solutions. In addition to this, they will initiate their own innovations to show they are already working on solutions (Penna & Geels, 2012).

Thus, it can be concluded that industrial sector actors are part of 'industry regimes', which utilize political strategies to gain influence on the policies made in the institutional environment. The industrial parties involved in the climate agreement can, for example, utilize lobbying, information strategies or non-compliance strategies in order to influence the debate around the climate policies that should result from the agreement. They will often place emphasis on the technical challenge and high costs of sustainable technologies, as well as show and express their ongoing efforts to contribute to the sustainability transition.

2.2 Communication theory and concepts

2.2.1 Corporate social responsibility

In addition to industry sector actors' desire to influence and be part of policy decisions on the sustainability transition, a further explanation for their involvement in the climate agreement can be found in the concept of corporate social responsibility (CSR). Industrial companies are ever more sensitive to the range of sustainability challenges that society at large is facing (Van Marrewijk & Werre, 2003). The concept of CSR is quite broad, as is shown by its definition developed by the World Bank (Petkoski & Twose, 2003):

> Corporate Social Responsibility is the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve quality of life, in ways that are good for business and for development (p. 1).

According to Reilly and Hynan (2014), the importance of the reputation of a company in terms of its CSR activities and its commitment to sustainability have caused changes in the corporate landscape. An important reason for this is that investors, consumers and suppliers' investment and purchasing decisions are increasingly driven by a businesses' CSR ranking (Reilly & Hynan, 2014). The current understanding of CSR lays a focus on the responsibilities of companies that transcends the limits of what law or legislation imposes on a company (McWilliams, Siegel, & Wright, 2006). This new view of CSR has resulted in the triple bottom line approach, which is commonly utilized to evaluate a companies' sustainability performance. The approach addresses the dimensions of environmental, economic and social measures (Aguinis & Glavas, 2012). In addition to the inherent responsibility that firms might feel, a factor that can be an even more important determinant for firms to integrate sustainability is the competitive advantage that it can give to them. In addition to this, corporate sustainability can enable firms to maintain a leading position in their sector (Laszlo and Zhexembayeva, 2017).

In the context of the NCA, it is especially relevant to look at why firms may want to take environmental measures and become more responsible and sustainable in this respect. The benefits of sustainability practices and the detrimental effects of unsustainable activities have been widely researched, with the main conclusion being that merely focusing on the economic element of sustainability is insufficient for a firm to be successful in its CSR efforts (Dyllick and Hockerts 2002; Rego, Cunha & Polónia, 2017). According to Ashrafi, Adams and Walker (2018), the environmental component of sustainability is currently receiving more attention because the detrimental effects firms have on the environment have been ignored or trivialized for a long period of time. This caused these problems to be underrepresented in business strategy as compared to social and economic issues (Lo, 2010; Schaefer, 2004). Important drivers for the transition to a more sustainable business strategy and environment are the external pressures exerted by customers, financial partners, NGOs and, in some cases, internal pressure from the business sector or the people working at a corporation (Keijzers, 2002).

With these pressures in place, firms find it ever-more important to communicate their sustainability efforts to the outside world. To do this, firms engage in CSR corporate communication, which "is designed and distributed by the company itself about its CSR efforts" (Morsing, 2006, p. 171). Two approaches to CSR communication can be taken, the first one being a reputation management approach, which focuses on the most basic requirements from society, thus doing and communicating enough to be able to keep operating as a business. The second approach is more explicit, as it aims to build a virtuous corporate brand (Van de Ven, 2008). Here, corporate communication instruments can be used to build this brand and to show the outside world that "the corporation excels with respect to their CSR endeavors" (Van de Ven, 2008, p. 345). Many corporations have started putting out sustainability reports or refer to sustainability in their mission statement (Reilly, & Hynan, 2014). Through content, style and tone, these forms of corporate communication provide shareholders,

consumers and other important company stakeholders with insight into the values at the basis of the organizations' culture (Van Marrewijk & Werre, 2003).

The growing importance for firms to actively engage in and communicate about activities that contribute to a more sustainable future has important implications for this study. Engaging in the negotiations for the NCA can help firms build their CSR reputation, as they can use their involvement in climate policymaking as a basis for their CSR communication. For this reason, it is expected that firms will be quite explicit in communicating about the importance of the agreement and the positive effects it will have on reducing CO_2 emissions. Companies' willingness to be regulated by the Dutch government to alleviate the detrimental environmental effects that they may have caused in the past can serve as an excellent story to tell when the aim is to improve the industrial sector's CSR reputation. The effects of pressures that other stakeholders like NGOs, customers or governments put on companies' sustainability measures show that those affected by an organization's objectives are gaining relevance. This points towards stakeholder theory, which will be discussed in the next section.

2.2.2 Stakeholder theory

According to Brugha and Varvasovszky (2000), stakeholder theory helps to map and understand the power, positions and perspectives of the stakeholders involved and affected by particular policies. Stakeholder analysis can provide a conceptualization that focuses on how different groups around a policy issue are interrelated and how they impact policy within a broader cultural, economic and political context (Brugha & Varasovsky, 2000). Freeman (1984) defines a stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives" (1984, p. 46). The three key attributes that identify the importance and classes of these different stakeholders were defined by Mitchell, Agle, and Wood (1997). They state that power, legitimacy and urgency are the most important features that determine how much attention should be paid to a certain stakeholder group. Identifying the presence or absence of these attributes enables the classification of stakeholders upon their salience to the organization. Stakeholders that hold two or even three of the key features are the ones that should be prioritized, as they are dominant, dangerous, dependent or definitive stakeholders (Mitchell, Agle, & Wood, 1997).

In contrast, Friedman and Miles (2002) propose a way of stakeholder classification that appreciates the range of relations that can occur between organizations and stakeholders. Their model categorizes stakeholders as compatible or incompatible versus necessary or contingent, enabling analysis of how relations between stakeholders and organizations change. This provides an explanation of why stakeholders interact with and attempt to influence organizations in certain ways. Additionally, Friedman and Miles (2002) state that the influence stakeholders have over an organization is determined by the structural nature of the relationship between stakeholder and organization, the contractual forms that exist between them as well as the institutional supports that ensure the fulfillment of these contracts. Although these theories of stakeholder identification and management are applicable to political processes, it should be noted that they were developed from a managerialist stance. Differences exist between public organizations and private corporations, and thus the application of stakeholder theory to governance processes should account for more complex expressions of this process as well (Flak & Rose, 2005).

To apply stakeholder theory to governance processes such as sustainability transitions, the principle of agency should be taken into account as well. The approach of using agency theory to address stakeholder relationships was suggested by Hill and Jones (1992). According to them, the language and concepts of agency theory are applicable to stakeholder relationships. Thinking of these relationships in terms of stakeholder agency allows for a description and explanation of the implicit and explicit contracts between organizations and their stakeholders (Hill & Jones, 1992).

2.2.3 Agency and power

To analyze and make sense of the influence and relevance of stakeholders involved in the NCA, their levels of agency and power are important units of analysis. Traditionally, agency theory is concerned with the challenge that arises when cooperating parties have conflicting goals and views (Jensen & Meckling, 1976). In this relationship, one or more parties (the principal) engages the other (the agent) to perform a service on their behalf, thereby delegating some decision-making authority to the agent. Agency theory aims to describe this conflict using the metaphor of a contract (Jensen & Meckling, 1976).

Within the context of policymaking, however, it is more appropriate to conceptualize agents as actors who have a certain amount of power. There are several ways to explain the operation of power. Dahl (1957) explains power in a linear way, as domination or 'power-over'. In this case, A forces B to do what B would otherwise not do. In contrast, Morriss (2006) suggests a perspective of power as a capacity for action (power-to). This power is often exercised in the form of resources and capabilities (Morriss, 2006). Here, agency does not refer "to the intentions people have in doing things, but to their capability of doing those things in the first place" (Giddens 1984, p. 9). Giddens (1984) attempts to locate the connection between action and power, suggesting that "to be an agent is to be able to deploy […] a range of causal powers, including that of influencing those deployed by others. Action depends upon the capability of the individual to 'make a difference'" (Giddens 1984, p. 14).

As a result, Giddens (1984) identifies a 'duality of structure' in power relations. The duality of structure is one of the main components of Giddens' structuration theory, proposing that action (as performed by actors) and structure are not independent of each other, but instead co-create each other. Structure mainly consists of the rules and resources that are present in institutions and affect future actions and decisions (Giddens, 1984). Thus, power is utilized by 'knowledgeable actors' to co-create structures and influence further actions and decisions.

In a like manner, Hajer (2006) states that actors are mutually interdependent in their construction of 'reality'. He argues: "the axiom is that in uttering statements, people react to one another and thus produce meaning interactively" (Hajer, 2006, p. 72). Hajer (1995) puts social action in the context of the duality of structure, stating that it "originates in human agency of clever, creative human beings but in a context of social structures of various sorts that both enable and constrain their agency" (Hajer, 1995, p. 58). Hajer (1995) advocates an interactive view of language as a communicative practice that influences actors' interests and preferences, stating that these are constituted through discourse. This results in an important implication for the study of environmental politics, namely that actors' perception of problems and possibilities can be changed through new discourses (Hajer, 1995). Thus, it becomes relevant to further explore the nature of discourses and what their role is in the policy-making and transition process.

2.2.4 Discourse and agency

In the research of discourse, the work of Michael Foucault is a basic and essential reference. In his later work on discourse, Foucault paid considerable attention to subjects and their agency (Foucault, 1982). Foucault sees subjects as effects of discourses, assuming that discourses offer specific positions on issues, which subjects then find and adopt (Spies, 2009). This process of adopting a discourse and thus a position on a certain issue can occur in three distinct ways, which were defined by Rabinow (1984). The first way in which a human can be made a subject is through dividing practices, where they are physically confined, for example in prisons or hospitals. The second way is scientific classification, where the discourses of life, labor and language were objectified and categorized. Finally, Foucault contributed the idea of subjectification, which are actions that people take to distinguish themselves and become subjects. Through this third, more active practice of making oneself a subject, Foucault provides space for the individual agency of the subject. This agency is posited in discursive structures and subject forms that constantly evolve (Rabinow, 1984).

Hence, the focus lays on the question of "how subjects are created in specific socio-historically situated societies" (Leipold & Winkel, 2017).

Foucault's views laid grounds for a discursive understanding of agency in social science, but also resulted in diverse interpretations. Scholars who interpreted Foucault's views mainly emphasize the structural determination of agency (Leipold & Winkel, 2017). In general, all approaches see the subjects as a result of discourses. However, they differ in terms of their position towards the relation between structure and agent. Although their views may vary, they all emphasize that agency "cannot be thought of independently from (discursive) structures that determine and constrain individual actors" (Leipold & Winkel, 2017, p. 511).

Drawing on Foucault's early conceptualization of discourse and agency, Hajer (2005) emphasizes the importance of agency in discourse, stressing that discourses *need to be* done. He defines discourse as an "ensemble of ideas, concepts, and categories through which meaning is given to social and physical phenomena, and which is produced and reproduced through an identifiable set of practices" (Hajer, 2005, p. 303). Here, discourse is not the same as discussion, as "discourse refers to a set of concepts that structure the contributions of participants to a discussion" (Hajer, 2005, p. 300). In this definition, the main focus is on practices of the actor, such as argumentation and the formation of coalitions.

Furthermore, Hajer (2005) states that identifying discourses contributes to the understanding of controversies around environmental problems, by recognizing the argumentative rationality that individuals bring to the discussion of such issues. Argumentative rationality links political structures such as discourses and institutions with individual ideas, interests and perceptions. It is a strategy for dealing with the shortcomings of human communication, which people handle through the use of storylines. According to Hajer (2005), these storylines are short statements that summarize complex narratives, thereby simplifying complex discourses (Hajer, 1995). People use storylines, assuming that the hearer will know what he or she means, which is often not the case. Despite this false mutual understanding, however, people can still cooperate to produce meaningful political interventions. These storylines form the basis of discourse coalitions (Hajer, 2005). This term refers to "a group of actors that, in the context of an identifiable set of practices, shares the usage of a particular set of storylines over a particular period time" (Hajer, 2005, p. 302).

To apply this theory to politics and governance, Hajer (2006) states that it is important to link discourse to power and dominance. To do this, Hajer (2006) identifies two relevant terms. The first one is discourse structuration, which arises when a certain discourse dominates the way a policy domain, a firm or a society views the world. The second term is discourse institutionalization, which occurs when a discourse solidifies into institutions and organizational practices (Hajer, 2006). A discourse is dominant if both of these conditions are present, and it thus structures the political debate and is standardized in political institutions (Hajer, 2006; Leipold & Winkel, 2017).

When a specific discourse coalition has gained dominance over a policy domain, it can be identified as a 'regime', as conceptualized in the MLP framework for sustainability transitions (Hermans et al., 2010). According to Geels (2014a), regime actors can utilize discursive strategies and dominant discourses to resist low-carbon transitions. Because of their access to media and high-status positions, the discourse coalition is more powerful in this area than, for example, civil society organizations, citizens and labor unions (Geels, 2014a; Lindblom, 2001). To this effect, Geels (2014a) proposed three different framing and discursive levels on which incumbent regimes can resist change. The first one is diagnostic framing, where issues are named and defined. The second level is prognostic framing, where solutions to these problems are achieved. The third level is motivational framing, where the reasons for action to solve the issue are identified.

Thus, the process of policy making in transitions can be viewed as a constant struggle of regime and niche stakeholders to establish a 'political truth'. Because many stakeholders aim to obtain agency, discourses in sustainability transitions consist of an array of storylines that communicate

different truths (Leipold & Winkel, 2017). This array of storylines requires stakeholders to define themselves in relation to the dominant discourse, taking up a subject position that gives actors the best chance of achieving 'political relevance' (Leipold & Winkel, 2017). This is an essential step for actors to obtain agency (Hajer, 1995), and for their storyline to become part of the regime. This interrelatedness of agency and discourse in political processes lead to the term 'discursive agency'. Leipold and Winkel (2017) define this as "an actor's ability to make him/herself a relevant agent in a particular discourse by constantly making choices about whether, where, when, and how to identify with a particular subject position in specific storylines within this discourse" (p. 524). To combat the dominant discourse, different discourses can be used and advanced by competing discourse coalitions, which are groups that aim to make their ideas and positions the basis for policy-making (Hajer, 1993).

Taking this into account, it is expected that the different actors involved in the NCA all use a certain storyline, in which they make clear what their position on the agreement is and how they visualize the transition required to reach the goals set in the agreement. These storylines point to a certain discourse that is present amongst multiple parties, to express mutual understanding and form a discourse coalition. The parties involved in these coalitions all utilize similar or the same arguments in favor of or against certain policy measures, with the aim of achieving political relevance.

2.3 Implications of the theoretical framework

The theory and concepts reviewed in the previous sections result in a number of implications and expectations for the research questions central to this study. First of all, the industrial sector and environmental organization stakeholders can be classified as two distinct types of actors within the transition, based on the multilevel perspective on transitions. The industrial sector stakeholders will likely be part of the incumbent regime, and will have a significant influence on the policy-making process, as these companies are important to the Dutch economy and the jobs of many citizens (Geels, 2012). These actors are part of 'industry regimes', which aim to influence the debate around climate policies by, for example, placing emphasis on the technical challenge and high costs that come with drastic transition measures and technologies. Furthermore, they will emphasize the efforts they are already making to work towards sustainability (Penna & Geels, 2012). This implies that they will explicitly communicate about their willingness and ambition to work towards the goals set in the NCA. Most companies in the industry regime are expected to still be very resistant to the transition, holding off innovations that are too radical. Once these developments have reached a later stage, however, they can play an important role in financing them (Rotmans, Kemp, & Van Asselt, 2001).

Although the environmental organizations' influence on the country's economic wellbeing is limited, they are also perceived as important when developing policies for the sustainability transition, as they represent the voice of many Dutch citizens. It can be expected that they put pressure on companies by addressing their responsibility towards society, a practice that has become more effective over the past years, as firms find it increasingly important to have a good reputation in terms of their CSR activities (Van Marrewijk & Werre, 2003). Though the environmental organizations are mostly at the niche level of the transition, their influence can become more substantial in later stages of the transition, as more innovation is accepted and tensions in the existing regime develop (Loorbach & Rotmans, 2010). Therefore, it is expected that the environmental organizations will call for radical innovation and developments to set the transition into motion.

Because actors can have very different interpretations and opinions of transitions, disagreement about what the requirements for such a system are can be expected. The concepts of agency and power pose important implications for the study of political processes towards sustainability, namely that actors involved in such transitions are dependent on each other's' construction and interpretation of 'reality'. Here, language and discourse influence stakeholders'

perception of what measures and solutions lie within the realm of possibility within the Dutch sustainability transition (Hajer, 2005).

Discourses are understood as mainly consisting of the actions of the stakeholder that is involved in the discourse, for example by using certain ideas, concepts or arguments (Hajer, 2005). Most relevant for the case of the NCA is the concept of discourse coalitions. To form such groups that share the same discursive understanding of a problem, it is expected that the stakeholders involved in the agreement will share a particular set of storylines or statements to influence or intervene in political decisions. These storylines are part of a shared discourse amongst multiple individual parties, allowing them to gain more relevance in the policy-making process. In forming such a coalition, the stakeholder groups aim to gain dominance over the political debate around a policy problem, thus obtaining so-called 'political relevance'(Geels, 2014a; Hajer, 1993; Leipold & Winkel, 2017).

3. Methods

The goal of this study is to explore the discourses and storylines used by the industrial sector and environmental organization stakeholders involved in the National Climate Agreement, as well as any changes in these discourses and storylines throughout the negotiation process towards the agreement. In order to gain insight into these discursive elements, as well as the management of the this transition process, a study consisting of two parts was carried out. The first part consisted of a content analysis, and the second part consisted of a small number of semi-structured interviews with informants from the industrial sector and an environmental organization.

3.1 Content analysis

3.1.1 Research design

In the first part of the research, a content analysis was applied to existing textual documents written by or about the key parties in these stakeholder groups. Here, coding was used to reconstruct different discourses and storylines from the textual documents. In addition to the identification of discourses and storylines in the text, data from three different periods distinguished within the negotiations were compared in order to trace any developments over time. The first period entailed the initial conversations about the agreement and resulted in a proposal for possible measures that could be taken to reduce the industrial sector's CO_2 emissions. During the second period, these proposed measures were further specified and discussed, resulting in a draft for the NCA. The third period was the most turbulent, with criticism on the draft agreement resulting in a polarized debate and political unrest.

Content analysis was chosen as an appropriate method for the goal of this study for a number of reasons. Krippendorf (2004) defines content analysis as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (p. 18). Here, the focus is on the process of content analysis, recognizing that the messages conveyed in texts are always part of a certain context and can be interpreted in multiple ways. Because of this, the content analyst draws certain inferences from the text. This is summarized by Merten (as cited in Krippendorf, 2004), who states that "Content analysis is a method for inquiring into social reality that consists of inferring features of a nonmanifest context from features of a manifest text" (p. 25). An important advantage of utilizing content analysis for the subject of the NCA is that it enables the inclusion of context, recognizing that the data analyzed are also read and interpreted by others. As a result, the conclusions drawn through content analysis are more likely to be relevant to other readers of the analyzed texts (Krippendorf, 2004). Because the texts that were written around and about the NCA are very context-specific, taking this context account is very important when analyzing them.

3.1.2 Selection of time periods

To be able to identify any changes or shifts in discourses and storylines present at the industry table, three separate periods in the negotiations were identified and compared, based around 'landmark' developments in the process. This allowed for a more detailed analysis of minor shifts in the discourses and storylines used by the stakeholders. The first period (February 21st , 2018- July 31st , 2018) comprised the first conversations and initial negotiations between the parties at the industry table. Parties took the first careful steps to propose a number of possible measures that could play a role in reaching the emission reduction goals. This resulted in a proposal for the key points of the Climate Agreement. Though some parties were more optimistic about this than others, they were generally hopeful that further negotiations would result in an effective final agreement.

The negotiations continued after the summer, marking the second period (August 1st, 2018- December 31st, 2018). The goal of this second round of negotiations was to come to actual agreements about what measures should be taken to effect the industrial transition. Although the parties spoke

about these measures until a week before the draft agreement needed to be presented, the environmental organizations decided that they could not support the proposals made in this agreement.

In the third period (January 1st, 2019- May 10th, 2019), the debate around the NCA became public and political, as calculations by the PBL and CPB showed that the industrial sector's proposed measures would not be sufficient to reach the agreement's targets. The industrial sector and the environmental organizations drifted further apart because of this, with the environmental organizations calling for a CO_2 tax and the industrial sector warning about its risks in the public media. This apparent hardening and polarization of the debate around the NCA could point to a possible change in how each stakeholder relates to the agreement and its effectiveness.

3.1.3 Codebook

Inductive coding was used to reconstruct discourses on the sustainability transition of the industry sector, as well as the storylines used by different actors. An inductive approach to content analysis is important in qualitative content analysis, as it allows for a true description of the content and the categories, and allows for a deep understanding of the material without bias as a result of preconceptions of the researcher (Mayring, 2015). According to Potter and Levine-Donnerstein (1999), the inductive approach to content analysis allows the researcher to present the findings from the analysis in a general context. In taking this approach, the current analysis does not aim at theory development, but rather at providing a description of the discourses and storyline elements in the content that is analyzed. This study codes latent pattern content, putting an emphasis on objective patterns that can be uncovered in the text, by "sorting through symbols and recognizing the connections among them" (Potter & Levine-Donnerstein, 1999, p. 259). When taking this approach, it is required that the researcher develops "a set of rules that move beyond the discrete elements and guide coders in making judgments about patterns among those elements" (Potter & Levine-Donnerstein, 1999, p. 263).

To develop such a set of rules, a first draft of the coding system was developed based on a reading of a number of the selected documents for each period and was applied to two documents per period for each stakeholder. After the evaluation of this initial code system, it was revised and finalized. This final code system was then applied to the full sample of data. The codes were grouped into eleven main categories that represented the key components and statements of the different actors involved. The final coding categories and their description can be seen in Table 1 and the final codebook can be found in Appendix B.

Table 1.
Code categories

Category	Description
Attitude (towards NCA)	How stakeholder views the NCA and whether they think it will sufficiently reach the targeted emission reductions.
Benefits and opportunities	Opportunities that the transition can offer to the industrial sector and/or the Netherlands.
Risks	Detrimental effects that certain proposed policies and measures to effect the transition can have.
Financing	Who should carry most of the costs that come with the transition.
Industry	The role that the industrial sector plays in the transition and to what extent it is taking the measures required.
Role of government	The role that the government should play in the transition.
Motivation	Reason for supporting the transition and the agreement.
Policy preference	Preferred policies for the NCA and the transition.
Requirements	Issues and aims that need to be paid special attention to when developing policies for the transition and the NCA.
Solutions	Envisioned technologies and measures that could or should be taken to effect the transition.
Vision	Broader view of what the transition, as part of the NCA, should look like and what it should entail.

3.1.3 Sample composition

The corpus of analyzed documents consisted of a number of different textual sources, the characteristics and sources of these documents and the sample spread over the different time periods can be found in Table 2. To select the organizations whose textual sources would be analyzed, an overview of the industrial sector and environmental organizations involved in the negotiations for the industrial sector component of the NCA was consulted. Both of the environmental organizations who were part of these negotiations were part of the analysis, these organizations are Natuur & Milieu and Greenpeace. In total, there were nine representatives from the industrial sector at the table, four of them being interbranch organizations. Of these, three were selected as units of analysis for the study, namely the VNO-NCW – representing all Dutch businesses, the VNCI – representing the chemical industry and the VEMW, combined with the 'Big 12'. The VEMW represents businesses using energy and water. In addition to the VEMW, a number of articles and texts of its members were analyzed, like for example Tata Steel and Shell, as these are among the 12 companies that emit the largest portion of greenhouse gases in the Netherlands.

The sampling technique applied to select relevant texts for the analysis was relevance sampling, also called purposive sampling (Krippendorf, 2004). As a first step, a large sample of texts— totaling around 100 — from the abovementioned organizations was selected from the organizations' own websites, as well as from news database LexisNexis. However, to ensure that the analysis of the sample was feasible within the available time and contained relevant and diverse texts, a smaller sub-sample was drawn from this sample. Here, a set number of texts per organization per period was selected, based on a number of relevance criteria. A first criterion was that the text contained information about the NCA and the industrial transition. A second criterion was that the text should not be limited to purely informative content — such as a description of what the process was — but actually contained a clear opinion or vision from the organization on the agreement or the sustainability transition. Additionally, because some organizations published press releases or articles in cooperation with each other, only one of these similar texts were selected in this second

round of sampling. This resulted in a sub-sample of texts that accurately represented how each stakeholder spoke about the NCA and/or the industrial transition.

As can be seen in Table 2, a smaller proportion of the analyzed documents were part of time period 1, as the analyzed stakeholders published a relatively small amount of public articles and letters during this period, making it difficult to select a large number of relevant documents for this period. The stakeholders went more public with their communication about the NCA when the first period of negotiations resulted in the key points for the agreement, hence making it possible to sample a larger amount of relevant documents for the second and third time period. In period 2, a few of the analyzed articles were relatively short, making it difficult to gather sufficient data from them. For this reason, a few extra articles were analyzed for this period, namely two extra documents from the VNCI, one extra document from the VEMW and 'Grote 12' and one extra document from Greenpeace. Finally, as can be seen in Table 2, the texts had varying genres, as the organizations themselves only published a few news articles per period, requiring other sources —such as news media and other organizations— to be consulted to provide a representative sample.

Table 2.
Corpus characteristics

Characteristics		N	%
Document type:			
	News article published by organization itself	22	42%
	Newspaper article	11	20%
	Letter from organization to political institution	9	16%
	News article published by other organization	7	13%
	Article in professional journal	2	4%
	Report	2	4%
	Press release	2	4%
Time period:			
	Period 1	10	19%
	Period 2	24	44%
	Period 3	20	37%
Industrial sector stakeholder:			
	VNO-NCW	10	18.5%
	VNCI	12	22%
	VEMW and 'Big 12'	10	19%
Environmental organization:			
	Greenpeace	12	22%
	Natuur & Milieu	10	18.5%

3.1.4 Data analysis

A content analysis was used to understand and structure the statements and textual content put out by the industrial sector and environmental organization stakeholders. The selected corpus of various actor documents was analyzed using inductive, open coding using ATLAS.TI as qualitative data software. The same codes and definitions from the codebook (Appendix B) were utilized for all three time periods. Although most codes were present in most of the time periods, sometimes the frequencies of certain codes differed amongst periods. More subtle changes and differences could be identified by qualitatively evaluating the codes and the quotations they were linked to. The codes were

applied to text segments of variable length, some comprising entire paragraphs and others only a few sentences or words.

In order to ensure that the codebook provided reliable results, the consulting of a second coder, to calculate intercoder reliability, was considered. In content analysis, this is a widely used method to measure the reproducibility and reliability of the research (Lazar, Feng, & Hocheiser, 2017). The complex and expert nature of the research topic, however, caused it to be unlikely that a second coder would be able to grasp the full context of the documents and, thus, made it unlikely that intercoder reliability would be achieved. For this reason, the second best option was opted for: intra-coder reliability, also called stability. This allowed for insurance that the coder's interpretation of the coding scheme had not changed over time (Lazar, Feng, & Hocheiser, 2017). To check if the researcher still had the same understanding of the codebook in a later stage of the research, 10% of the Corpus was recoded, with a focus on documents that were coded early in the analysis process, mainly stemming from the first and second time period. This second round of coding was then compared to the initial sub-codes given to the text segments in these documents. Here, the requirement for a coded quotation to be noted down as the same was that both the category code and the sub-code were the exact same as the initial code, to ensure that both the main and sub codes were understood in the same way as in the beginning of the coding process. To calculate the Cohen's kappa, these codes were then segmented per code category and the kappa was calculated for the total of the sub-codes comprising each category. In this way, the average Cohen's kappa for each coding category could be calculated in SPSS. The kappa values for each code category can be found in Table 3. For the coding categories 'Financing' and 'Role of government' the kappa values were quite low considering that they represented intra-coder reliability. As a result, to ensure that the rest of the quotations coded with labels from these categories was still applicable to the researcher's understanding of the codebook, all of the segments coded with these categories were re-evaluated, and some of the codes assigned to the quotations were changed where necessary.

Table 3.
Code categories with Cohen's kappa

Category	Cohen's kappa
Attitude (towards NCA)	.95
Benefits and opportunities	1.00
Financing	.70
Industry	.84
Motivation	.92
Policy preference	1.00
Requirements	.94
Risks	.91
Role of government	.62
Solutions	.90
Vision	1.00

After the intra-coder reliability was calculated and some of the code labels given to certain sections were adjusted, a selection of the sub-codes from the categories were grouped together to reconstruct three different discourses and the storylines associated with these. The discourses labeled 'Sustainable industrial sector' and 'Drastic industrial transition' could be linked to the industrial sector stakeholders and the environmental organizations respectively. In addition to this, a discourse labeled 'Industrial transition lead by the Netherlands' could be linked to both of these stakeholder groups. These discourses had become apparent from the data analyzed and the occurrence of certain codes in documents related to the industrial sector or environmental organization stakeholders.

The different codes that belonged to each of the three discourses were grouped together in ATLAS.TI, using the network view to visualize and structure the components of each of these discourses that represented their core elements. By using these features in the program, the discourses could be further analyzed and compared. The usage of these discourses by each party in each period could be quantified, and a more in-depth analysis of the different categories constituting each discourse allowed for the identification of subtle changes or evolutions in the discourses.

3.2 Interviews for further exploration and confirmation

3.2.1 Research design

In addition to the content analysis of existing documents, in-depth interviews with a small number of industry and environmental organization actors were carried out. As it was difficult to contact and speak to a large number of involved stakeholders, these interviews were mainly used as an extra enrichment for the content analysis. Speaking to the parties involved was a suitable way to add some depth to the content analysis, as well as to discuss how the parties involved experienced the negotiation process and the overall development of the NCA. To conduct these interviews, a semi-structured interview approach was used.

3.2.2 Participants

To select participants for the in-depth interviews, the technique of purposeful sampling was used. This approach is often used in qualitative research, especially when information-rich cases need to be selected in order to effectively use limited resources (Patton, 2002). Participants for the interview were selected on the criterion that they have expert or extensive knowledge on the topic of interest (Cresswel & Plano Clark, 2011). In the case of this research, the relevant individuals had to be employed at one of the organizations involved in the NCA, and preferably have been closely involved in the negotiation process. All of the industrial sector and environmental organizations involved were contacted through email, and from the ones that replied the most appropriate ones were chosen as interview subjects. Two of the selected interviewees were employed by an industrial sector interbranch organization. Both of them were involved in the negotiation process. The participant from Industrial party 1 was mostly involved in the more technical and substantive part of the NCA, whilst the participant from Industrial party 2 played an important role in the internal and external communication about the NCA for the organizations' members. The third participant was employed by an environmental organization and was also the participant that was most closely involved in the negotiation process, as they sat at the 'main' industrial sector table.

3.2.3 Data collection and procedure

The interviews were conducted in the first half of May 2019, each of them taking around 50 to 60 minutes. In advance of each interview, the participants were contacted through email and briefly informed about the general content and goal of the interview. At the beginning of each interview, the research was further explained to the participant and they were informed about how their data would be used and that it would be fully anonymized. Subsequently, the interviewee was asked for verbal consent to record the interview. This allowed for a slightly more informal atmosphere, which had the beneficial effect of making the participant more comfortable in talking about the somewhat difficult and sensitive issue of the negotiations for the NCA. The interviews were performed in Dutch, as this was the native language of both the participants and the researcher.

A number of prepared questions around a number of topics (Appendix C) were used as the basis for each interview, with a few organization-specific questions that were prepared based on the topics for discussion. The topics discussed in these interviews were based on the key themes and categories that were determined in the content analysis. First, some basic information about the role of the interviewee and the organization they work for was asked. Secondly, the organizations'

motivations for joining the negotiations and the hopes they had at the beginning of these were discussed. Here, the contents of the NCA and their ability to reach the emission targets were also discussed. Thirdly, some questions about the role of the industrial sector as well as the government in the transition were asked. After this, the topic of a (national) CO_2 tax for the industrial sector as well as the alternative for this, called 'bonus-malus', were addressed. Finally, the participants were asked about their view of the negotiation process and how it was managed, how they viewed the role of representation by the media in this process and whether they could identify any changes throughout the negotiation process.

3.2.4 Data analysis

After the interviews were conducted, they were fully transcribed and analyzed using the coding scheme developed to analyze the initial corpus (Appendix B). This codebook did, however, not cover the topics of polarization and politicization of the NCA, as well as the stakeholders' view on management of the negotiation process, which were discussed extensively in all interviews. Therefore, in order to collect and structure the data on these topics, a number of extra codes were created. These codes covered the content of the relevant citations that were found in the interview transcripts and allowed for further analysis of this data.

4. Results

The results of this research are divided into three parts. First of all, resulting from the content analysis, two competing discourses and one overlapping discourse on the NCA and the sustainability transition are identified and the core elements of their related storylines are discussed. Secondly, the developments and changes in these discourses throughout the three time periods are described and identified by taking a more detailed look at the different categories that are part of these discourses. In the third part, the results of the interviews are discussed. Here, the participants' responses are linked and compared to the core elements of each of the discourses identified in the first part. Finally, the participants' view of how the negotiations were managed, as well as the role of polarization and politicization in the negotiation process and how this could influence the final outcome, are discussed.

4.1 Content analysis: three major discourses on NCA and transition

From the content analysis, two competing discourses on the NCA and the Dutch sustainability transition were identified. The first of these discourses could be identified amongst all industrial sector stakeholders, the second was shared amongst all environmental organizations. Additionally, one overlapping discourse was identified, this discourse was generally shared by most stakeholders analyzed. Table 4 gives an overview of these three discourses, showing the relative frequency with which the codes constituting these discourses were used by each stakeholder group over the total of the three time periods. As is visible in Table 4, the competing discourses were not used exclusively by either the industrial sector or the environmental organizations, as some elements overlapped or were occasionally mentioned by both parties. Qualitative analysis of the coded data, however, showed a clear general distinction between how the two stakeholder groups related to the NCA and the industrial transition. An overview of the narrative elements used in the storylines related to the three discourses can be seen in Table 5, these elements are further discussed in the next sections.

Table 4.
Three discourses and their usage by the industrial sector and environmental organizations

Discourse	Relative frequency of use	
	Industrial sector	Environmental organizations
Sustainable industrial sector	81%	31%
Drastic industrial transition	37%	82%
Industrial transition lead by the Netherlands	33 %	29%

Table 5.
Overview of major discourses and their storylines

Discourse	Storyline elements constituting discourse			
Sustainable industrial sector	NCA and Paris Agreement are main drivers for transition.	Industrial sector is sustainable and will reach objectives.	Competitive position should be kept intact.	Measures should be taken at an international level.
Drastic industrial transition	Urgency of climate change is main driver for drastic transition.	Industrial sector is not taking enough responsibility.	Need for e.g. CO_2 tax to make transition more effective and just.	Transition will lead to economic and societal benefits.
Industrial transition lead by the Netherlands	Vision of an industrial transition to reach NCA targets.	Transition can have beneficial effects for competitive position and society.	Need for support of innovative technologies by the government.	Societal support is essential for successful NCA and transition.

4.1.1 Competing discourse 1: A sustainable industrial sector

The first competing discourse and the storyline elements used to simplify it can be summarized as 'a sustainable industrial sector, that has effects beyond sector- and national boundaries whilst retaining its competitive position'. As can be seen in Table 4, this discourse and its storyline elements are shared by most of the industrial sector parties that were studied in the content analysis: they consider the need to conform to the Paris agreement and, thus, the NCA as the main basis for the industrial transition, stating that the industrial sector is already relatively sustainable and will be able to reach the emission reduction targets. The organizations sharing this discourse tell stories that speak of the many sustainability possibilities that the industrial sector offers, for example in terms of technological innovation. However, they also strongly emphasize that industrial companies' competitive position should be kept intact. Because most of the industrial sector incumbents operate at a European or global level, any strict policies should be taken exclusively on this level as well. The different elements constituting this discourse are elaborated below.

4.1.1.1 Industrial sector is sustainable and can reach reduction goals

The targets set in the NCA, which are based on the Paris Climate Agreement, are mentioned as the most important driver for supporting the industrial transition by most industrial sector stakeholders. They emphasize that reducing CO_2 emissions is a challenge to the industrial sector, but that they fully intend to reach the objectives and that they are able to. They take this as the main basis for supporting the industrial transition. The VEMW, for example, formulates the importance of the industrial sector in reaching the objectives as follows: "The Dutch industrial sector is leading in reducing its CO_2-emissions and can deliver the indispensable building blocks for a sustainable society." (D7).

In addition to this, parties put considerable emphasis on the responsibility that the industrial sector has taken in the past to reduce emissions. Parties often stress the emission reductions that the sector has already accomplished in the past, as VNCI, for example said: "The CO_2-emissions by the industrial sector in the period between 1990 and 1960 have decreased substantially (by 32%) […]. The Dutch industry is one of the most sustainable in the world." (D3). This past success is then used to support and illustrate the industrial sectors' ability and willingness to take sustainable measures

to further its reductions. Statements similar to those from VNCI were coded 32 times (4%) throughout the industrial sector documents.

The main way through which the industrial sector can reach the emission reduction targets is by putting a strong focus on innovation. Industrial parties mentioned innovation as a solution 32 times (4%). Not only will ground-breaking technologies make production processes more sustainable, they will also improve the industrial sector's and the country's competitive position. The innovative technologies envisioned by the industrial sector can take on many forms, but the ones mentioned most often are green hydrogen (20 times) and Carbon Capture and Storage (CCS) and Carbon Capture and Utilization (CCU) (25 times). The industrial sector proposes a combination of these innovations as absolute requirements to reach the 2030 reduction goals, saying that they should all be kept as viable options to make the industrial sector more sustainable. VEMW, for example, puts it as follows: "Electrification and CCS are the 'draught horses' of the industrial transition. In the short term, we have no other option."(D6).

4.1.1.2 International, cross-sectoral transition enabled by the government

With the main goal being the fulfillment of the targets set in the NCA, the industrial sector stakeholders then go on to emphasize that it is imperative to keep the sectors' competitive position intact. This is the only way in which the sector can reach its emission reduction objectives and go through a sustainability transition. As the VNCI puts it: "The VNCI strives for an agreement in which the industrial sector can become sustainable without harming its international competitive position. […] this is our most important requirement for the route towards sustainability." (D19). Similar statements were made 29 times (4%) by other industrial sector parties.

The government should play an important role in this, by providing long-term investment security for companies, as the investments required for the transition are not yet profitable and thus 'insecure'. If this investment risk is not covered by subsidies, it is incredibly difficult to realize the aforementioned innovations and technologies that are needed to reach the reduction goals. This is exemplified by Shell: "The perspective needs to be sufficiently attractive for companies to invest in the transition. This is why the investment risk should be covered, otherwise investments will not get off the ground. International companies need to be enabled to make choices, and we of course want them to choose the Netherlands." (D26).

Another important way to ensure the economic viability of the industrial transition is to take an international and cross-sectoral approach when aiming for emission reductions. The industrial sector does not stand alone in its production activities, but is part of a larger system that goes beyond sectoral boundaries. To truly reap the benefits of a transition, the government needs to facilitate cross-sectoral workings and operations through policies and the enabling of infrastructure. This vision of a cross-sectoral approach to the transition is shared by a large number of industrial sector parties (37 times, 5%) and illustrated by the VNCI: "Through this [a mix of technological solutions] the industry can also offer solutions to reduce CO_2 emissions in other sectors […] a focus that is limited to sectoral goals stands in the way of a cost-effective approach." (D43).

4.1.1.3 Need for international measures

Not only can the Dutch industrial sector contribute to making other sectors more sustainable, but its impact on CO_2 emission reductions can also be global. It is important to remember that the industrial sector operates on an international level and can, therefore, be a world leader in innovation and transition measures. Following this reasoning, industrial parties agree it should be possible to increase national production, provided that this production is sustainable compared to other countries. This is illustrated by VNO-NCW: "There has to be a possibility to attract more production with a higher CO_2-efficiency -as compared internationally. A new Climate Agreement that is focused on making the Netherlands a testing ground for the energy transition, has global significance once

more sustainable energy-intensive production takes place in the Netherlands." (D12). This can also strengthen the sectors' competitive position, as it makes the Dutch industry more attractive to investors.

Following from this, strict, national measures proposed by environmental organizations, such as a 'generic' CO_2 tax on the industry's emissions, are seen as extremely risky measures that will not reach the targets of the NCA. To oppose these measures, industrial sector parties warn that these policies can cause 'carbon leakage' and damage the Dutch industrial sectors' competitive position. Not only will this result in job loss and decreased economic welfare, but it will also cause more CO_2 emissions on a European or international level. The risk of national measures not resulting in global emission reductions was mentioned most frequently, as it was coded 30 times (4%) throughout the industrial sector's documents. For example, the directors of VEMW, VNCI and VNPI state: "… 2.7 Mt of CO_2 emissions will leak to other countries. Production that is currently happening in the Netherlands will happen elsewhere as a consequence of a national CO_2-tax. As a rule of thumb, this production in other countries will lead to a larger amount of CO_2 emissions." (D41).

If market-based mechanisms to put a price on CO_2 are to be put in place, this should only be done on a European or, preferably, an international level. Most parties mention the European Emissions Trading Scheme (ETS) as a system that already regulates CO_2 reduction. If the Netherlands wants a higher price on CO_2, it should form a 'coalition of the willing' with surrounding countries. Such international measures were mentioned 32 times (4%). They are the only effective way in which global emission reductions can be realized, as the industrial sector has to retain its competitive position in order to avoid carbon leakage. This is illustrated, for example, by Shell: "CO_2 pricing is appropriate once there is a critical mass: therefore, we need to get other European countries like Germany, England and Belgium to join us."

Despite the need for international measures, the Netherlands should still play a leading role in the transition. In doing so, the country can attract sustainable production, investments and effect projects that will have a lasting positive impact on the economy and the environment. The VNO-NCW states: "The Netherlands needs to be a testing ground for new technologies and innovative investments. In this way, Dutch climate policy can have a global impact and our earning power can be fundamentally improved." (D16). This need for the Netherlands as a leader in the transition is shared by most industrial sector parties, as similar statements were made 30 times (4%) throughout the analysis.

4.1.2 Competing discourse 2: Drastic industrial transition

The discourse among the environmental organizations and the storyline elements used to simplify it can be summarized as 'a true industrial transition, with a new, green, economy in which costs and benefits are distributed equally and disruptive climate change is prevented'. In a number of ways, this discourse opposes the one held by the industrial sector actors. As can be seen in Table 4, this discourse is used most frequently by the environmental organizations that were analyzed: they regard the urgency of the climate crisis and the many risks and detrimental effects that it will have on the world and the people living in it as their core motivation for advocating a drastic industrial transition. The industrial sector is not taking enough responsibility to take the measures and pay the costs required for this transition, resisting any real change in the current fossil fuel-based system. To change this, the government has to become more strict and instigate policies like a CO_2 tax to lower the emissions of the industrial sector in an effective and just manner. This drastic and just transition will lead to many economic and societal benefits. The core elements of this discourse and the storylines related to it are elaborated below.

4.1.2.1 Urgency of the climate crisis

The environmental organizations address the urgency and risks of climate change, as well as the societal need to do something about this, as their main driver for taking part in the NCA negotiations. Therefore, they continuously stress the need to reach the emission reduction goals set in the agreement, as not conforming to the Paris Agreement will have dire consequences. This need for the Netherlands to conform to the international climate agreement is often repeated (18 times, 4%), with the organizations reminding the government that the measures in the NCA should be in line with the promises the Dutch government made in Paris. The need for this is very urgent, as the effects of climate change are becoming ever-more visible around the world. This is exemplified by the following statement by the organizations: "55% [CO_2 emission reductions by 2030] is needed to reach the Paris climate goals and to prevent disruptive climate change. There is an urgent need for ambitious climate policy: Dutch CO_2 emissions are at the same level as in 1990 and the consequences of climate change are increasingly visible. The costs we have to make for this right now far outweigh the benefits of a livable future." (D33). The urgency of the climate problem is mentioned most frequently as the organizations' motivation to support the transition, appearing in the analysis 29 times (7%).

4.1.2.2 Industrial sector should take more responsibility

Having addressed the urgency of the problem and the need to cut emissions to zero by 2050, the environmental organizations generally express disappointment in the level of responsibility and ambition taken by the industrial sector to reduce its emissions. Although the industrial sector has expressed ambitions to take serious measures, it holds of anything that would require it to contribute to the large investments required for sustainable technologies, even though these can offer many benefits to them. Greenpeace, for example, states: "The industrial sector has resisted [any strict measures] for nine months. I thought the multinationals would be true to their words, that they would take climate protection seriously." (D49). This need for the industrial sector to take more responsibility is mentioned frequently by the organizations, appearing in the analysis 41 times (9%).

As a result of the industrial sector holding off most of these drastic measures, the organizations stress that the proposed policies in the NCA will not be sufficient to set off a true industrial transition. Technologies like CCS are regarded as temporary, expensive measures that are too insecure to play a significant role in the industrial transition. The fact that these measures were not restricted in the proposed agreement was one of the main reasons why the organizations left the negotiations. The following statement illustrates this: "The door is being held wide open for temporary measures like CCS. Temporary measures will not structurally lower emissions, and are a waste of money."(D29).

Not only will the goals not be reached, but the costs for the measures will also be unfairly distributed between the industrial companies and citizens. The industrial sector companies do not take their responsibility in terms of the costs for the transition, which is especially detrimental to the success of the NCA, as societal support for the transition will decrease once costs are unequally distributed. For example, a press release by the organizations reads: "A fair distribution of the costs and benefits is crucial for an executable agreement with sufficient societal support. It is very simple: those who pollute the most should pay the most." (D29).

4.1.2.3 Drastic policy measures

To lower the emissions of the industrial sector in an effective and just way, the organizations propose national, binding measures like a CO_2 tax. The preference for a policy measure like this was mentioned 47 times (10%) by the environmental organizations in the analysis. The tax will ensure that the industrial sector contributes to the financing of the sustainable measures that are needed. By putting in place a binding measure like this, the government will take a stricter, leading role, which the

organizations think is crucial if the transition is to be successful. Greenpeace, for example, states: "It is clear that much more powerful policies are needed to lower the industry's unchanged, high CO_2 emissions." (D27).

The money that is raised through a CO_2 tax can be combined with the subsidies for sustainable technologies- and innovation that already exist. These should, however, only be spent on 'truly sustainable' measures, with a focus on green hydrogen and electrification and a cap on CCS and CCU. Natuur & Milieu, for example, says: "We think this money [subsidies] should be spent on truly sustainable changes for the long term." (D54). By only offering support for these 'truly' sustainable technologies, the organizations stress the need for a drastic change in industrial processes. This need for truly sustainable technologies and solutions was mentioned 34 times (8%). Instead of gradually moving away from the current fossil-fuel based processes, the government and the industrial sector should make the drastic changes required to cut emissions to zero by 2050. This is illustrated by Greenpeace who states: "… we are keeping the old economy alive. The current installations, like refineries that are based on fossil fuels, will not go through a true transition. But that is what has to happen by 2050, and the industrial sector agrees with this." (D49).

4.1.2.4 A green economy

The environmental organizations have a long-term vision of a fully transitioned industry and society, based on renewable sources and innovative technologies. They emphasize the many benefits that the industrial transition — effected with the abovementioned measures — can have for Dutch citizens and society as a whole. More importantly, they also emphasize the benefits for the industrial companies' and the Netherlands' competitive position. Not only will an industrial transition result in a better living environment, but it will also create jobs and financial benefits for the industrial sector and the people working in it. Greenpeace, for example, states: "The industrial sector can create benefits for itself. Namely, with the yield of a CO_2 tax the industry can implement its sustainability plans. With such a subsidy, the industry can become more sustainable right now and create the technologies of the future right here in the Netherlands, making us the international leader in this area. This results in a competitive advantage and employment opportunities." (D50). Similar benefits of a 'green economy' were mentioned 20 times (4%) by the organizations.

Thus, the parties promoting this discourse propose alternatives to the measures that they find insufficient and paint a bright future in which the issue of climate change is tackled and the Dutch economy can thrive. Although this discourse is mostly antagonistic to the industrial sectors' discourse and aims to compete with it, some elements in this discourse also overlap with the one described in the previous section. This points to an overarching discourse, to which both the industrial sector actors and the environmental organizations aim to relate their own discourse and storylines.

4.1.3 Overlapping discourse: The Netherlands leading the industrial transition

The competing discourses and storyline elements described in the previous section suggest that the industrial sector and the environmental organizations are quite different in their view of the NCA and how a transition of the Dutch industry should be realized. Despite this, however, an overlapping discourse could also be identified, and can be summarized as 'An industrial transition, that can have economic benefits if the Netherlands takes the lead in developing sustainable, innovative technologies'. The storyline related to this discourse is shared between most of the industrial sector and environmental organization stakeholders: they have a vision of a transition in the Dutch industrial sector, which is required to reach the emission reduction targets and conform to the Paris Climate Agreement. If executed correctly, this transition can have many beneficial effects for the industrial sector's competitive position, as well as for all Dutch citizens. Important requirements for this success are innovative technologies like green hydrogen and electrification, which should be encouraged and supported by the government. Finally, societal support for the proposed measures is imperative in

making the NCA and the transition successful. The core elements of this discourse and the way that each stakeholder group relates to it are further described below.

4.1.3.1 Industrial transition

All of the parties analyzed speak of an 'industrial transition', where the long-term vision, for 2050, is a system in which the industrial sector has cut most or all of its emissions and is mostly based on renewable sources. This is in line with the industrial sector goal set in the NCA, and all parties see possibilities for reaching it. The VEMW, for instance, states "… the transition of the industry to innovative, modern and almost CO_2-neutral commercial activities. […] concrete measures have the potential to reduce industrial CO_2 emissions with 95% in 2050, with the active involvement of the government."(D7).

When expressing their support for the NCA and the industrial transition, the stakeholders point to the necessity of these measures to conform to the Paris Agreement and reduce the Netherlands' CO_2 emissions. This requires many solutions and changes from the industrial sector, all parties emphasize the necessity for these and their willingness to support these. Natuur & Milieu, for instance, states: "The Climate Agreement says that the industry's emissions have to be reduced to zero by 2050. This means that factories need to be rebuilt. Instead of fossil fuels, they have to start producing with renewable electricity." (D54). Thus, the motivation for supporting the agreement that was mentioned frequently by all stakeholders (52 times, 4%) was the reduction goals set in the Paris Climate Agreement and the NCA.

4.1.3.2 Benefits of transition

The second element of this discourse is the beneficial effects that the industrial transition can have for both the industrial sectors' competitive position and the overall Dutch economy. Both parties use stories that speak of a future 'green' economy and the benefits that could result from these to support their policy preferences and arguments. The emphasis here is on the leading role that the Netherlands can play in the transition and how being an international leader in the area of sustainable innovation can result in a thriving, sustainable industrial sector. The VEMW, for example, puts it as follows: "… The Netherlands, by being a leader in the energy transition, can have a substantial economic benefit from the innovations that come with it and from its positioning as a forerunner in the global energy transition." The environmental organizations also highlight the benefits that the drastic, sustainable measures they propose can have for the economy, as well as the opportunities these offer for the industrial sector. Natuur & Milieu, for example, says: "The climate transition offers opportunities that the industry should grab with both hands. […] In this way, the industrial sector can get a head start on its competitors and create green jobs." (D51). Similar statements were made by all parties throughout the analysis, with a total of 44 (4%) mentions of the economic benefits of the transition.

4.1.3.3 Innovation and societal support

A number of requirements and solutions for the industrial transition are advocated by both the environmental organizations and the industrial sector. All parties stress the necessity of innovation and investment in technologies like green hydrogen and electrification. The government has an important role to play in this, for instance by providing subsidies to companies who aim to invest in these technologies. The VNCI, for instance, states: "There are many more possibilities. But that does require a substantial investment in the production capacity for green hydrogen and pipelines for transport. The chemical industry is interested in receiving more green hydrogen." (D18). The environmental organizations share this vision for innovative technologies as the core for the transition, stressing that stimulating these is essential if the industrial sector is to cut its emissions. In line with the industrial sector parties, they think the government should provide support and subsidies for these measures. Greenpeace, for example, states: "Applying green hydrogen in the

industrial and energy sector enables a scale-up that can reduce the costs substantially. The government has to take the lead in this." (D26).

Finally, societal support for the transition measures is mentioned as a crucial requirement by both the industrial sector and the environmental organizations. Because societal support is one of the main themes and requirements for the government in relation to the NCA, all parties refer to this topic, for example when proposing certain measures for the agreement. VNO-NCW, for instance, states: "Wide societal acceptance of the chosen policies […] now has the highest priority. Citizens and companies should not become further estranged from the climate goals." (D39). The environmental organizations also tie into the government's need for societal support. For instance, in a press release, they stated: "A fair distribution of the costs and benefits is crucial for societal support and the willingness [of people] to get to work [on sustainable measures] themselves." (D32).

4.2 Content analysis: changes in discourses

The following sections describe a number of developments and changes in the previously described discourses and their coded components over three periods of the negotiation process. Although no striking changes occurred in the major discourses, some smaller changes can be identified when looking at individual components of the discourses. The tables in this section show the relative frequencies for selected code categories and groups over time periods for the industrial sector and environmental organization stakeholders. They are illustrative for notable changes and developments. However, statistical relevance cannot be claimed given the limited sample of documents and the differing lengths of the contents of these documents.

4.2.1 Changes in overall discourses

As can be seen in Table 6, all three discourses were subject to minor changes throughout the three time periods. When looking at the usage of 'Sustainable industrial sector', it can be seen that the industrial sector parties referred to the elements of this discourse more often in Period 2 and Period 3, with a rise of around 10% between Period 1 and 2. Interestingly, this change also occurred for the environmental organizations, who showed a 10% decrease in their reference to the elements of this discourse between Period 1 and 2. This change is reflected in the general usage of this discourse, which also showed a decrease between Period 1 and 3. This development suggests that the industrial sector parties became stronger aligned in how they spoke about the transition and mentioned the elements that constituted the 'Sustainable industrial sector' discourse more often. At this level of abstraction, however, it is difficult to say what caused these changes, as the discourse consists of a substantial number of code categories and sub-codes.

When looking at 'Drastic industrial transition' in Table 6, it is visible that the environmental organizations showed a slight change in how often they used this discourse, with Period 2 marking the most frequent use (85%) and Period 1 the lowest (66%). The industrial sector actors only related to this discourse less in Period 3. Similar to the first competing discourse, the parties sharing 'Drastic industrial transition' may have become stronger aligned as the negotiations progressed, putting more emphasis on the key elements constituting this discourse. It is, again, difficult to say what exactly caused these changes.

Finally, when looking at 'The Netherlands leading in industrial transition', it can be seen that the usage by both the industrial sector parties and the environmental organizations of this discourse decreased by 8% between Period 1 and 3. An explanation for this might be that both stakeholder groups were more closely aligned in Period 3, meaning that they used their own competing discourses more strongly in this period, and thus had less overlap and agreement on the elements constituting the overlapping discourse.

Table 6.
Changes in the three discourses throughout time periods, per stakeholder group and in general

	Relative frequency of use		
	Sustainable industrial sector	Drastic industrial transition	The Netherlands leading in industrial transition
Period 1 (industry)	70%	38%	38%
Period 2 (industry)	83%	38%	34%
Period 3 (industry)	82%	31%	27%
Period 1 (environmental)	40%	66%	31%
Period 2 (environmental)	29%	85%	22%
Period 3 (environmental)	30%	83%	34%
Period 1 (all stakeholders)	67%	48%	38%
Period 2 (all stakeholders)	63%	56%	29%
Period 3 (all stakeholders)	59 %	54%	30%

Although Table 6 shows some fluctuations and developments in how frequently each discourse was utilized by the different parties, the broad and sometimes overlapping nature of the code groups constituting the three discourses makes it challenging to say why exactly these developments occurred. In order to investigate these changes in a more detailed manner, the following sections discuss a number of developments in the different categories constituting each of the three discourses, with a focus on the stakeholder groups that used these discourses most frequently.

4.2.2 Changes in competing discourse 1: A sustainable industrial sector

When looking at the changes in how frequently the industrial sector actors made statements related to the code categories constituting their shared discourse, a few minor developments can be identified. The changes in the categories Policy preference, Risks, Solutions and Vision can be seen in Table 7 and are further investigated and explained in the following sections.

Table 7.
Changes in code categories discourse 1 for the industrial sector

Code category	Relative frequency of use		
	Period 1	Period 2	Period 3
Attitude (towards NCA)	7%	8%	9%
Benefits and opportunities	4%	3%	2%
Financing	4%	3%	4%
Industry	9%	14%	13%
Motivation	7%	8%	6%
Policy preference	8%	12%	14%
Requirements	13%	13%	9%
Risks	6%	9%	16%
Role government	8%	4%	3%
Solutions	18%	20%	10%
Vision	12%	6%	4%

4.2.2.1 Policy preference

A change in the mention of policy preferences that are part of the discourse 'Sustainable industrial sector' can be identified in Table 7. Policy preferences that are linked to this discourse are international measures, such as a global and/or European CO_2 tax or the EU ETS, as well as measures such as the ODE+ and the 'bonus-malus' system, which provide subsidies for industrial companies who come up with innovative technologies and ambitious plans to implement these in production processes. As can be seen in Table 7, the industrial sector parties increasingly mentioned these measures, starting with 8% in Period 1, going up to 12% in Period 2 and 14% in Period 3.

The frequency of the related sub-codes in these periods and qualitative evaluation of their related quotations show that this change mainly occurred because the 'bonus-malus' system was mentioned as a preferred policy more often. In Period 1, this term and policy did not yet exist and was thus coded 0 times. In the months that followed, the industrial sector parties started vouching for this policy, which was developed during the negotiations and became an important part of the proposal for the NCA, resulting in it appearing most frequently in Period 3. Additionally, the parties increasingly emphasized the need for an international perspective on the transition, especially in response to the increasing media attention for the environmental organizations' proposal of a national CO_2 tax in Period 2 and 3. The industrial parties responded to this public debate by stating that such a tax should only be put into effect in cooperation with surrounding countries, as the effects of a national tax on the industrial sector's competitive position would be catastrophic.

4.2.2.2 Risks

A second increase can be seen in the risks mentioned by the industrial sector parties, as Table 7 shows that industrial sector parties referred to these risks more frequently in Period 2 than in Period 1 (3% increase) and, subsequently, even more frequently in Period 3 (7% increase).

A more in-depth look at the frequency of the sub-codes in this category and discourse over the three time periods show that the change in the 'risks' category is caused by an increased mention of two risks. First of all, the industrial sector parties mentioned the risk of job loss and deteriorated economic welfare only a few times in Period 1, sometimes warning of these consequences if the climate policies in the NCA would not take the industrial sector's competitive position into account sufficiently, but focusing more on the possible solutions and alternatives. This changed slightly in Period 2 when the negotiations around the agreement became more difficult and concrete, with the debate around the proposal for the NCA causing the industrial sector parties to advocate more strongly for the need for an international approach to climate policy and the economic risks that measures like a CO_2 tax would pose. This trend continued in Period 3, when, for example, a group of industrial companies publicly warned about the dire consequences a CO_2 tax would have for their competitive position and, thus, for the jobs of the many people working in their plants. All industrial sector parties shared this concern, also warning of the risk that there would be no global emission reductions because of carbon leakage, which was also mentioned more frequently in Period 2 and 3. This would, again, be a consequence of a national CO_2 tax, which the industrial parties say will result in Dutch industrial production moving to countries where the industrial sector is less efficient and sustainable, resulting in a global increase of emission reductions.

4.2.2.3 Solutions

In addition to the increase in mention of risks and policy preferences, Table 7 shows a fluctuation in the mention of solutions by the industrial sector parties. Although a slight rise in the coding of this sub-category can be seen between Period 1 and 2, a decrease of 10% occurred between Period 2 and 3. The discourse 'Sustainable industrial sector' consists of a combination of possible solutions and opportunities that should be taken to effect the industrial transition, with the most important ones being innovation in technologies like green hydrogen, CCS and CCU.

The frequency of the sub-codes for each solution in these periods and qualitative evaluation of their related quotations show that this change stemmed from a combination of a decrease in mention of innovation, green hydrogen, and CCS and/or CCU as possible solutions. In Period 3, the public debate on the NCA became primarily focused on the possibility of a CO_2 tax and the supposed ineffectiveness of the measures proposed by the industrial parties, which were said to be unable to reach the emission reduction goals. This development called for a reaction from the industrial sector parties, who then started focusing more on the possible risks for the economy and the emission reduction goals, shifting their focus away from the many solutions they had offered in the first two periods. This can be linked to the increased mentioning of the risks by these parties, as was discussed in the previous section.

4.2.2.4 Vision

A final development can be seen in the vision for the transition that the industrial sector parties mentioned throughout the three time periods. As is visible in Table 7, there was a decrease of the mention of the industrial sector parties' vision for the transition between the periods, changing from 12% in Period 1, to 6% in Period 2 and lowering to 4% in Period 3. When looking at the sub-codes that are part of this discourse, it is visible that the largest decrease occurred at the level of the so-called 'cross-sectoral transition', which the industrial sector parties put much emphasis on in Period 1, stating that they could contribute to emission reductions beyond sectoral boundaries and that the government should take this perspective for the NCA as well. The decrease that occurred here can, again, be explained by the public debate on the NCA, which mostly focused on the CO_2 tax. This caused the parties to shift their focus from the cross-sectoral element of the transition and the possible benefits that could be reaped from it to a more hardened and clear position on the effects of a CO_2 tax and the need for international measures. Though they still occasionally mentioned the need for cross-sectoral measures, they were far less frequent than in the first two periods.

4.2.3 Changes in competing discourse 2: Drastic industrial transition

When looking at the changes in how frequently the environmental organizations made statements related to the code categories constituting their shared discourse and its storyline, a few developments can be identified. The changes in the categories Attitude (towards NCA), Industry and Policy preference can be seen in Table 8 and are further investigated and explained in the following sections.

Table 8.
Changes in code categories discourse 2 for environmental organizations

Code category	Relative frequency of use		
	Period 1	Period 2	Period 3
Attitude (towards NCA)	10%	15%	9%
Benefits and opportunities	3%	3%	6%
Financing	4%	10%	6%
Industry	1%	10%	11%
Motivation	12%	13%	7%
Policy preference	3%	17%	14%
Requirements	15%	20%	17%
Risks	7%	4%	12%
Role government	0%	6%	1%
Solutions	12%	3%	9%
Vision	4%	6%	3%

4.2.3.1 Attitude towards NCA

A change in the 'attitude' component in the 'Drastic industrial transition' discourse held by the environmental organizations can be identified in Table 8. The general attitude towards the agreement that is part of the organizations' storyline is that it will be insufficient to reach the emission reduction goals set by the Dutch government, partially because the measures proposed are not concrete enough. In Period 2, the environmental organizations mentioned their doubts about the agreement more frequently (15%) than in Period 1 (10%). Subsequently, the mention of the measures being insufficient decreased again in Period 3 (9%).

A cause of this decrease could be found by looking at the sub-codes that were part of this category, as well as the quotations linked to these. In Period 1, the environmental organizations expressed their concerns about the contents of the discussion at the 'industry table', stating that there were no concrete plans and no choices had been made yet. These proposals would not be sufficient to reach the reduction goals of the NCA. This concern became stronger in Period 2, when the organizations eventually made the decision to leave the negotiations, with the main reason for this being that the agreement would not result in the transition that is needed to avoid the dangerous effects of climate change. They held on to this position in Period 3, as it was confirmed by the PBL that the plans would not be sufficient. However, this development also offered the organizations the opportunity to speak of the alternatives and to propose new measures that would be more concrete. They put more emphasis on the benefits and opportunities that more concrete climate policy measures could offer, as can also be seen in Table 8.

4.2.3.2 Industry

As can be seen in Table 8, the notion that the industrial sector does not take sufficient responsibility, both in terms of innovation and finance, in effectuating the transition increased between Period 1 and Period 2. Although this category forms an important part of the 'Drastic industrial transition' discourse, it was only mentioned a few times in Period 1. In contrast, it formed a large part of the discourse in Period 2 and 3.

Qualitative evaluation of the quotations related to this category show that the main cause of this change is that the environmental organizations were still in the middle of the negotiations in the first period, and though they expressed some concern about the concreteness of the plans proposed, they were still careful in how they spoke about the industrial sector parties at the table. This changed drastically in Period 2 when they responded to some claims by the industrial sector about its past reductions and the responsibility the sector took for the transition. They started expressing dissatisfaction with the willingness of the industrial sector to discuss certain measures like, for example, the CO_2 tax. When the organizations finally decided to leave the table, they became even more expressive about the irresponsible attitude of the industrial sector, stating that they would not keep their promises. This continued in Period 3, when the aftermath of the proposal for the NCA resulted in both the industrial sector stakeholders and the environmental organizations becoming increasingly opposed to each other.

4.2.3.3 Policy preference

Finally, a change in the mention of policy preferences that are part of 'Drastic industrial transition' can be identified in Table 8. The most important policy preference that is linked to this discourse is a national CO_2 tax, as well as subsidies for sustainable measures. In Period 1, there was only little mention of a national CO_2 tax by the environmental organizations. This changed in Period 2, when the mention of a tax (sometimes combined with subsidies) increased to 17%.

This increase was a response to the industrial sector's frequent mention of and preference for the 'bonus-malus' system (see section 4.2.2.1), with the environmental organizations stating that this system is too uncertain to reach the required reductions and will not sufficiently push the industrial

sector companies to take drastic measures for sustainability. A CO_2 tax is a suitable alternative for this, as it will ensure cost-effective emission reductions and a fair distribution of the costs for innovation. In Period 3, there was somewhat less frequent mention of this CO_2 tax. The main change in this period can be identified as the environmental organizations showing increasing willingness to combine the tax with subsidies for innovation, which could be partially financed by the funds collected from the CO_2 tax.

4.2.4 Changes in overlapping discourse: The Netherlands leading in industrial transition

When looking at how frequently both stakeholder groups made statements related to the code categories constituting the overlapping discourse, a few changes and developments can be identified. These changes occurred in the categories Requirements and Solutions. The changes in these categorical elements of the overlapping discourse can be seen in Table 9 and are further explained in the following sections.

Table 9.
Changes in code categories discourse 3 for industrial sector and environmental organizations

Code category	Relative frequency of use		
	Period 1	Period 2	Period 3
Benefits and opportunities	5%	5%	5%
Motivation	6%	7%	5%
Policy preference	5%	3%	5%
Requirements	6%	4%	3%
Risks	2%	1%	2%
Solutions	11%	8%	6%
Vision	6%	4%	4%

4.2.4.1 Requirements

As can be seen in Table 9, a slight decrease in the mention of the requirements that are part of the overlapping discourse occurred between Period 1 (6%) and Period 2 (4%), becoming even lower in Period 3 (3%). The requirements that are part of the overlapping discourse are societal support for the transition and the NCA, as well as cooperation between the different parties in the negotiations.

An explanation for this decrease could be found by looking at the sub-codes that were part of this category, as well as the quotations linked to these. The largest change occurred in the sub-code related to cooperation between the parties that were part of the negotiations. In Period 1, this was mentioned quite a few times, but this decreased in Period 2 and 3. In Period 1, both the environmental organizations and the industrial sector parties went into the negotiations with the hope to come to an agreement that was widely shared by all parties involved, thus stressing the necessity for cooperation to come to an agreement that would effect the transition. Once the negotiations went into a more serious and challenging phase in Period 2, however, the decision by the NGO's to leave the negotiations resulted in the industrial sector parties stating that it was disappointing that they would no longer cooperate, but that the agreement was still important and sufficient to reach the targets, despite it not being supported by all parties involved.

4.2.4.2 Solutions

Table 9 also shows a decrease in the mention of the solutions that are part of the overlapping discourse. Although these were mentioned quite frequently in Period 1 (11%), this slightly decreased in Period 2 and 3. The discourse 'The Netherlands leading in industrial transition' consists of a combination of possible solutions and opportunities that should be taken to effect the industrial transition, with the most important ones being innovation as well as technologies like green hydrogen and electrification.

A cause of the slight decrease in the occurrence of these sustainable technologies and innovations in the documents can be found in the development that was described in section 4.2.2.3, which showed a decrease of the industrial sectors' mentioning of the same technologies that are part of the overlapping discourse. As the negotiations became more serious and challenging in Period 2, both the environmental organizations and the industrial sector parties put increasing emphasis on their policy preferences, as well as the benefits of those measures and the risks of the measures proposed by the other. This strong relation to these elements of their competing discourses caused the focus to shift slightly away from the technologies and solutions that they did agree on, as a decrease in the mentioning of electrification (from 3% to 1%) and innovation (from 5% to 3%) are visible when looking at the relative frequencies of their related codes in Period 2. This continued in Period 3 when the mention of green hydrogen also decreased (from 4% to 2%).

4.3 Stakeholder interviews: major discourses and a polarized negotiation process

In this section, the results from the interviews with informants from the industrial sector and environmental organizations are discussed. Here, their responses are linked and compared to the storyline elements of the two competing discourses distinguished in the content analysis, as well as to the overlapping discourse that was identified (see Table 5). Finally, the participants' view of how the negotiations were organized, as well as the role of polarization and politicization in the negotiation process and how this could influence the final outcome, are discussed.

4.3.1 Competing discourse 1: Sustainable industrial sector

From the interviews held with the participants from the industrial sector, a considerate proportion of the motivations and visions that were mentioned can be linked to the industrial sector's competing discourse, of which an overview can be found in Table 5. Similar to the storyline elements of this discourse, the participants spoke of the importance to reach the reduction goals set in the NCA, as well as the responsibility that the industrial sector has taken by agreeing with and working on sustainability measures. The need for an international and cross-sectoral perspective, supported and lead by the government, was also stressed by both participants. This is further elaborated below.

4.3.1.1 Industrial sector is sustainable and can reach reduction goals

Both interviewees from the industrial sector mentioned the emission reduction goals, as set in the NCA when asked why they joined the negotiations and aim to be part of and support the industrial transition. For example, participant 2 said: "… in response to the Paris climate agreement, something has to be done about CO_2-reduction, in the hope that we can have a better living environment." Although the reduction goals are a challenge to the industry, both interviewees stress that these goals can be reached, as the industrial sector has many options to become more sustainable, for example by developing innovative technologies and by attracting investments that will allow the Dutch industrial sector to pioneer in sustainable production. Participant 1, for example, said: "We have always said, and our member companies have always said that we can reach the 49 percent [emission reductions] just fine, we have identified the projects required and we know what we have to do." Similar statements were made 10 times (3%).

Furthermore, both industrial parties state that the measures proposed in the industrial sector chapter of the NCA will be sufficient to reach the emission reduction targets. The industrial sector took on a lot of responsibility by agreeing with these measures, as they will require them to make plans on how to become sustainable. This measure will enable companies to make the changes required to effect the industrial transition. Participant 1, for example, said: "I think the agreement gave a lot of insight into how we can shape the transition. It gave a clear view of how companies can go to zero emissions […]. So our view was: this is a good offer that is going to bring us very close to our 2030 target."

Both interviewees mentioned green hydrogen and CCS and CCU as solutions that can help the industrial sector reach its goals, especially in a cross-sectoral context, as the industrial sector can contribute significantly to the reductions of other sectors by developing these innovative technologies. This is exemplified by participant 2: "For example, we believe that green hydrogen can play a very big role […] And technologies like CCS and CCU have to be developed further as well, but we see a lot of potential in them."

4.3.1.2 International, cross-sectoral transition enabled by the government

Developing innovative technologies and realizing the economic potential of the transition does, however, require financial compensation from the government in order to maintain the sector's competitive position. Industrial party 1, for example, stated: "We also see that there are certain costs that come with that, investment costs, that are currently not profitable […] and therefore, if you want them to reduce their emissions and not lose their international competitive position, you will have to give a certain amount of compensation to these companies." This need for governmental support of innovations and other measures required for the transition was mentioned 19 times (6%) by the participants.

Furthermore, enabling the cross-sectoral element of the transition is vital to reach the required reductions. The industrial sector can contribute significantly to other sectors, for example by developing new technologies or by sharing residual products and energy. It is essential that the government takes this perspective when making decisions for the transition, and makes it a priority to facilitate the infrastructure and legislation required to set up such cross-sectoral projects. Participant 2 exemplifies this need: "We need to go from a fossil-fuel oriented, centralized system to a sustainable system with renewable energy […] This can be done through making cross-sectoral connections, for example by using industrial residual heat for the built environment, or by applying green hydrogen in both the industrial sector and the mobility sector." Similar statements related to these cross-sectoral solutions were made 15 times (5%) throughout the interviews.

4.3.1.3 Need for international measures

Both parties emphasize the international element and perspective that should be included in the transition, as the Dutch industrial sector can have an important impact on global CO_2 emission reductions. The Netherlands should attract sustainable industrial production and become a world leader in this area, without being limited by its national CO_2 reduction goals. This need for international measures was mentioned 8 times (3%), for example by participant 1: "But make sure we do not only achieve that CO_2-emission reduction in the Netherlands but that it is an international contribution. So we do not want carbon leakage." For this reason, the regulation of emission reductions should mainly be executed on a European level, for example through the EU emissions trading system (EU ETS), which was mentioned as a suitable mechanism by both participants.

The alternative of a CO_2 tax, as proposed by the environmental organizations, is generally regarded as a measure that will not reach the objectives and will damage the industrial sectors' competitive position. Both participants emphasized the risks and detrimental economic effects such a measure could have, as it will discourage investors from putting their money into Dutch industrial

projects, causing loss of jobs and economic welfare. These risks were mentioned 20 times (7%) by the participants. In addition to this, the carbon leakage as a result of a CO_2 tax will have detrimental effects on global emission reductions. Because the Dutch industrial sector is already relatively sustainable, the movement of any production to other countries will, in no way benefit the climate. Participant 2, for example, said: "[with a CO_2 tax] You will get the exact opposite of what you want because you are exporting business and thereby employment opportunities in the Netherlands, so your economy is worse off. And the climate too, because it will lead to production in other countries that are less sustainable and efficient because there are fewer norms there. So both the climate and the economy will be worse off." Thus, although the national reduction goals might be reached, there will be little or no global emission reductions.

4.3.2 Competing discourse 2: Drastic industrial transition

From the interview held with the participant from the environmental organization, a considerate proportion of the motivations and visions the participant mentioned can be linked to the discourse 'Drastic industrial transition', which is held by the environmental organizations involved in the NCA. An overview of this discourse can be seen in Table 5. Similar to the storyline elements of this discourse, the participant spoke of the urgency of the climate problem and the need to do something about this as the basis for the industrial transition. Drastic measures are needed for this, but the industrial sector is, generally, unwilling to take these. This is why an incentive by the government is needed to create a greener system of which both the industrial sector and Dutch citizens can benefit. These elements are further described below.

4.3.2.1 Urgency of the climate crisis

The participant was very clear about the organizations' motivation for joining the negotiations and supporting the industrial transition, stating that the urgency of the climate problem and the need for a drastic change in the current fossil fuel-based system require climate policies that reach the reduction goals set in the Paris Climate Agreement. The participant said, for example: "So, look, our goal was an effective climate policy: that the [emission reduction] goals are reached and that there is a switch in each sector." For this reason, the participant emphasized the fact that the contents and measures of the proposed NCA were not sufficient to reach the objectives and, therefore, could not receive support from the environmental organizations. The participant referred to the need to conform to the agreement 9 times (6%) throughout the interview.

4.3.2.2 Industrial sector should take more responsibility

Despite the urgency of the problem, the participant indicated that the industrial sector was not very willing to take drastic measures, remaining very strong in its position that there should be no extra costs for the transition and holding off any measures that went beyond the 'level playing field'. This is reflected in the proposed agreement, as the 'bonus-malus' system enables the industrial companies to make their own plans, not sufficiently incentivizing them to take drastic measures. The participant exemplified this lack of responsibility from the industrial sector as follows: "It [the NCA] was too soft. We negotiated for ten months, and what came out of it? Everyone will make a plan. And if we don't achieve our goals we will make a new plan, it was very non-committal. And there was no guarantee that the goals would be achieved because the fine for not meeting your plan was 0, so there was no incentive to even execute it." The participant made similar statements about their disappointment in the responsibility taken by the industrial sector 10 times (6%) throughout the interview.

This lack of strict measures in the agreement causes it to be insufficient to set off a true industrial transition and reach the emission reduction goals. In addition to this, the costs for the transition will not be fairly distributed, resulting in a deterioration of societal support for the NCA. The participant said: "We are not at all against subsidies. But we are against it when citizens and SMEs have to pay

those for the industry. And […] it is really about societal support. I mean, we are asking quite a lot from people, we want them to install solar panels, a heat pump, to drive an electric car, to isolate their houses. And they think: 'well if I'm doing all these things and the refineries keep burning, what difference does it make? And I'm also paying for their energy tax.' [..] And that is what you want to avoid, you want everyone to know that they have their own share."

4.3.2.3 Drastic policy measures

To make sure all parties have an equal share in the transition, the participant argued for a national CO_2 tax. Not only will this result in more societal support, but it will also nudge the industrial sector to become more sustainable because it will result in economic incentives to invest in sustainable innovation and technology. In this way, the government can take on a stricter role in the transition, providing companies with an effective and clear measure that will provide the right incentive to invest in the technologies required for the transition. The participant said, for example: "The government exists to solve market failure. And I think the climate problem is the ultimate market failure […] So the government has to solve that by stimulating companies to innovate, through subsidies, but also by pricing [of CO_2 emissions]. Or by fining them and checking whether they are complying with standards."

Another requirement for a true industrial transition that the participant mentioned was a focus on 'truly sustainable' technologies, such as green hydrogen, instead of leaving room for CCS and CCU, as was done in the proposal for the NCA. The latter are merely temporary technologies, that should not receive the largest portion of innovation subsidies. This is illustrated by what the participant said: "I would have liked to see that the position on CCS would have been: okay, we will need it for a short while, but we will limit the extent to which we use it. And we will put all our bets on green hydrogen and make sure we start a transition there, that companies are unburdened, that we give subsidies for it and make agreements on cost reductions." The participant frequently stressed the need for these truly sustainable measures throughout the interview, mentioning it 8 times (5%).

4.3.2.4 A green economy

According to the interviewee, having an incentive for the industrial sector to truly transition can have many beneficial effects, like new, green jobs for Dutch citizens. More importantly, however, the transition will create many financial benefits for the industrial sector. Companies can become very innovative and leading, giving them a competitive advantage over other industrial sectors that are still lagging behind. The many opportunities that the transition offers should receive more attention, the participant called on the industrial companies to pay more attention to what it could offer them. For example, the participant said: "What I had really hoped, and what part of the industry does want, is to really see those opportunities. And that they have the prospect of a green industry: 'yes we have to go to 0, we are just going to go, we can be leaders, we will take that mover advantage'."

4.3.3 Overlapping discourse: The Netherlands leading the industrial transition

In addition to the opposing views and discourses discussed in the previous section, the interviews also revealed a number of overlapping themes and visions between the participants from the industrial sector and the environmental organization, which can be related to the overlapping discourse that was labeled 'The Netherlands leading the industrial transition'. An overview of this discourse can be seen in Table 5. The storyline elements of this discourse that could be identified in all interviews are the need for and benefits of a transition in the industrial sector, as well as the important role that innovation in ground-breaking technologies plays in this. These are further elaborated below.

4.3.3.1 Benefits of industrial transition

All three participants spoke of an 'industrial transition', which should be set into motion in order to reach the 2050 goal of (near) CO_2-neutrality in the industrial sector. All of the participants expressed the view that the Netherlands could be internationally leading in the transition and that there could be many benefits for the industrial sector if the country takes this position. Doing so will provide the sector with new technological innovations, investments and jobs. The government plays an important role in realizing the transition and its benefits, by providing the right incentives, for example through subsidies for innovation. If the Netherlands is successful in this, other countries will start to follow, finally resulting in a ripple effect that will cause global emission reductions. These sentiments were present in all interviews, with the requirement for the Netherlands to be leading mentioned 16 times (4%), and the benefits of the transition being mentioned 13 times (3%). Participant 2, for example, said: "We think that, if we take a sensible approach to it in the Netherlands, so with the government as a facilitator that provides innovation subsidies where it is needed, we can also promote it internationally and create business opportunities. We call that the testing ground for innovative solutions in the world." Similarly, participant 3 (from the environmental organization) said: "I hope we can be a guiding country for other countries. And that we can show them that it is possible and that it offers many benefits. And that the rest will then join us."

4.3.3.2 Innovation

In addition to the benefits of an industrial transition, the participants also advocated for a number of measures and technologies to help bring about this transition. First of all, they agreed that there was a need for substantial investments in long-term innovation projects that could truly transform the way industrial sector companies produce and use resources. The participants all mentioned that this is a challenge for some sectors, two participants using the difficulty for Tata Steel to reduce emissions in its production process as an example. Though it might be difficult for some sectors, all participants see possibilities for these technologies, frequently mentioning green hydrogen as one of the main technologies in the transition (12 times, 3%). Participant 2, for example, said: "Look at the steel process. There, you need a temperature of over 1000 degrees, you won't make it by firing some extra biomass. So you need something like green hydrogen or some form of ammonia. But that requires a lot of innovation."

Additionally, the government has an important role to play in making sure these expensive innovations are realized, for example by providing subsidies to help companies invest in them. The need for the government to set up a policy and subsidy system that enables innovations is exemplified by Participant 3: "There are a lot of studies into what technological developments are required. But I think we need to create a system in which it will all actually work." Similar statements about the need for the government to implement subsidies and other measures were made 21 times (5%).

4.3.4 Negotiation process, polarization and representation in the media

The interviews also gave insight into how participants looked back at the negotiation process for the NCA and the role that polarization and politicization played in this. All participants expressed hesitation about how effective the set-up and management of the negotiation process was, commenting on the proportion between the different parties and the lack of transparency in the process. Furthermore, the discussion and negotiations hardened near the end, with both parties taking on a stricter position towards the other. This was worsened by the polarization and politicization of the NCA, partially caused by the media's selective presentation of the core issues of the agreement. The participants agreed that the public debate became solely focused on the CO_2 tax and that this was not beneficial for the negotiations and the complicated process of the transition. Finally, all participants find the outcome of the NCA difficult to predict, but are hopeful that an agreement will eventually be reached. These issues are further elaborated below.

4.3.4.1 Management of the negotiation process

The participants were not very positive about how the process of the negotiations was managed and set up, expressing discontent with the proportion of NGO's compared to industrial sector parties at the table. Although the parties disagreed about how the balance should have actually been, they all acknowledged that the government's coordination and leading of the process towards the agreement were limited. This lack of coordination made the negotiations at the table quite difficult, as there was no real neutral party who took on the role of building bridges between the parties and working towards a compromise. There was no clarity on what the role of each party at the table was and there was a lack of transparency on the decisions that were made. Participant 2, for instance, said: "If there had been better direction from EZK, right from the beginning, with clear communication about what was expected from whom. Then I think it [the process] would have been a lot more structured. […] And that, of course, is a guarantee for a process in which no one is in control." Similarly, participant 3 said: "I think the way the negotiations went was very messy and unclear and not transparent. So, often, it was unclear: do I have to convince the industrial sector or the ministry? […] It was kept very ambiguous and that did not help the negotiations."

4.3.4.2 Hardening of the debate and the negotiations

As a result of this unclear process, the participants indicated a hardening in the discussion between the parties near the end of the negotiations, in which distrust between the two sides grew, making it ever-more difficult to reach an agreement. The environmental organizations felt like their comments and demands were not being heard and taken up into the draft of the agreement. Although they were willing to compromise and went along with discussions and further research into the difficult topics at the table, there was no rapprochement from the industrial sector's side. To exemplify, participant 3 said: "I think we were always very constructive during the discussions. […] In the end, it did harden a bit. Because we thought: well, we just can't have that discussion, because when we wanted to talk about the CO_2 tax the industry said: I'm not going to talk about that, I will walk away if we do."

The industrial sector, however, felt like their willingness to cooperate to work towards the transition was not enough, despite them having done a large number of concessions. The proposed measures, like the bonus-malus system, already show a lot of ambition and willingness from the industrial sector to transition. However, the distrust from the other organizations and the general public resulted in measures that were too strict. Participant 1, for example, said: "It completely shifted from working on a solution together, and the industrial sector is going to do more than it should because we have the possibility to do more. To: 'well, go on and supply, industry. We are going to force you to'. […] But that is not how we should shape the transition. So yes, I've seen that hardening very clearly."

4.3.4.3 Polarization and politicization of the NCA

An important theme mentioned by all participants was the polarization and politicization of the debate around the NCA. One of the causes for this development was that the government did not effectively communicate the measures that were in the agreement, enabling the media to select and highlight anything they wanted from it. The negative image of the industrial sector that already existed in the media and society could be further stressed by this, and presenting the issue in this way fully took it out of the context of climate change and emission reductions, which the agreement as actually about. Participant 1, for example, said: "That also has to do with other discussions that have nothing to do with climate but with the image of the industry as money-grabbers and profiteers. Banks, bonus, everything goes into the same box." Participant 3 added to this that the lack of a real discussion about the CO_2 tax at the industry table was also an important cause for the polarization of the debate, as this became the main topic in the media after the proposal came out. The media oversimplified both sides

of this debate, causing it to become polarized and taking away the nuance that both the industrial sector parties and the environmental organizations aim to put into their opinion on the topic. Participant 3 said: "… we are accused of being idealistic and picking one side, while the industry is doing that as well. But actually that is mainly done by the media because I am certain that the industry also tells them a nuanced story, but that disappears, and that is how media works. […] And that is a shame." Similar statements about the polarization of the debate around the NCA were made 17 times (4%) throughout the interviews.

Both participants from the industrial sector said that, because the proposal for the NCA was published very close to the elections, the political parties took it as a chance to advocate their own points on climate policy more strongly, causing the issue to become very political and mainly about the distribution of costs and benefits. All participants expressed discontent with the polarization and politicization of the debate, saying that they would have preferred a more constructive discussion with each other to find common ground. Participant 1, for example, said: "I do find it unfortunate that it has become so political. On the one hand, it is good because it can become a public debate. But especially because it became so political in a time of elections, the parties felt the need to profile themselves on it, to really put down their opinion on it very clearly. […] and that does not help when you are working on a 30-year transition, which we are going into right now."

4.3.4.4 Expectations for outcome of NCA

The participants found it difficult to predict the final outcome and whether there will actually be an agreement. This is mainly due to the fact that the debate has become so political, as the lack of nuance and facts in the discussion makes it seem difficult for the parties to come to an agreement. Participant 2, for instance, said: "The discussion is way more about images than about facts and economic rationality. And that also makes it very hard to predict the outcome, it might be something that we will not be able to agree on."

Despite the outcome being difficult to predict, all interviewees remain optimistic, still holding out hope that there will be a positive outcome and that the parties will be able to reach an agreement. Though the heated and polarized debate in the media makes it seem like the parties are very far apart, they both state that they have been and will be willing to make concessions. Some participants hinted that they might not be so far apart after all, as they both agree on the need for effective measures to start the transition. Participant 1 said: "The environmental organizations do not really think the plan that the ministry has [for CO_2 tax] is very good. And we do not find it very good either, but for other reasons. So that gives us room to say: 'what alternative could we offer, together?' So yes, I do see some movement there. I think that we, in fact, are not that far apart in terms of our rationale and our approach. […] So I do still have some hope." Participant 3 shares this hope: "Well, I do really hope that something will come out of it and that we can do something together with the industry in a constructive way."

5. Discussion

5.1 Main findings

The process towards the National Climate Agreement is an imperative part of the Dutch sustainability transition. To provide insight into the policy-making process at the industry sector table of the agreement, the three research questions that form the basis of this study are answered below.

5.1.1 Discourses amongst stakeholders in the NCA

The first research question posed in this study is: What major discourses and storylines are present amongst the industrial sector and environmental organization stakeholders in the Dutch National Climate Agreement? The results of the content analysis, enriched by semi-structured interviews, showed two competing discourses, consisting of different storyline elements. The stakeholders from the industrial sector referred to the need to comply with the reduction targets set in the NCA as the main driver for the transition, which can be accomplished by the industrial sector through innovations. This should be achieved on an international level to retain the sector's competitive position and reduce emissions beyond sector- and national boundaries. These findings are consistent with the expectation that these parties would emphasize the high costs of sustainable technologies, whilst also demonstrating the efforts they have already made to become sustainable (Penna & Geels, 2012).

In contrast, the environmental organizations advocate for a true industrial transition, with a new, green economy that fairly distributes the costs and benefits of the measures needed and prevents disruptive climate change. This requires drastic innovations and strict climate policies. Here, the environmental organizations take on the role of niche actors, who initiate radical innovation in the transition process and put pressure on the incumbent regime by pushing for alternative technologies and pathways (Loorbach & Rotmans, 2010; Ceschin, 2013).

The involved companies and organizations define themselves in relation to the different discourses using storylines to simplify their complexity and form opposing discourse coalitions. This is in line with Hajer's (1995) and Leipold and Winkel's (2017) findings on the discursive elements of policymaking in transitions, where stakeholder groups formed these coalitions to gain dominance over the political debate around a policy problem.

Finally, an overlapping discourse could also be identified, with both stakeholder groups speaking of an industrial transition, which can result in economic benefits for the Netherlands if it takes the lead in developing sustainable, innovative technologies. The emergence of this overlapping discourse was quite surprising, as previous research suggests that the stakeholders would form opposing coalitions and communicate different truths (Leipold & Winkel, 2017). The relation of both coalitions to the same discursive elements suggests that there might be a dominant discourse, which structures the political debate and is standardized in political institutions, as conceptualized by Hajer (2006). This dominant discourse could be shared by other important actors in the transition, like the governmental institutions involved, thus explaining why the actors from opposing coalitions both refer to its elements. The 'transitions storyline', which Smith and Kern (2009) found was institutionalized into policy practice by the Ministry of EA could be related to this overlapping discourse, as this formed the basis for the new transitions approach.

5.1.2 Changes in discourses throughout the negotiation process

The second research question asks to what extent the discourses and storylines changed throughout the negotiation process. The analysis showed that, throughout the three periods identified in the negotiation process, there were no significant changes in the overall nature of each discourse. However, some slight changes in the frequencies of some of the discourse's storyline elements could be identified. These showed that the main changes occurred in the policy preferences expressed by

the stakeholder groups, with a stronger reference to their preferred way of providing industrial companies with incentives to become sustainable towards the end of the negotiations. In addition to this, both stakeholder groups put increasing emphasis on the risks of the measures proposed by the other party. In line with Kemp's (2010) findings on transitions, this can mainly be explained by developments at the landscape level of the transition, where the public debate around the insufficiency of the proposal for the NCA raised public awareness for a CO_2 tax, putting pressure on the industrial sector stakeholders, who then started changing their position towards such a measure. This development was beneficial to the discourse shared by the environmental organization stakeholders, who received more room to advocate for niche developments such as alternative and radical technologies and policy measures (Geels, 2002).

This response to the developments in the public and political debate on the NCA was also visible in the overlapping discourse, as both stakeholder groups started referring less to the solutions that were part of its storyline as the negotiations progressed. The attention shifted away from the possible solutions and technologies that both groups agreed on, as they started to focus more on responding to the measures proposed by the other parties and the points raised in the public debate. The changes found are in line with Leipold and Winkel's (2017) statements on the dynamic nature of how stakeholders use discourses to make themselves relevant, as the choices made in this need to be constantly changed and adapted to the political debate. Although the overall discourses and storylines remained mostly the same throughout the negotiation process, the viability of the option of a CO_2 tax did slightly change, possibly showing the first opening for structural change in the regime.

5.1.3 The process towards the NCA and transition

The final research question central to this study is: How do the industrial sector and environmental organization stakeholders look back at the process towards the NCA and the role of polarization and politicization in this process? The results of the interviews with representatives of each stakeholder group show that they are unsatisfied with how the negotiation process was set up and coordinated by the government, as there was no transparency in the process. This, in part, caused a hardening in the discussion between the stakeholder groups. Additionally, the results show that polarization and politicization of the discussion around the NCA started playing an important role after the proposal was published, when the discussion in media and the public debate became solely focused on the CO_2 tax, seemingly dividing the stakeholder groups even further. The elections that were close to the release of the proposal also made the debate very political, and the final outcome of the agreement difficult to predict.

As the Ministry of EA has been applying 'transition management' for quite some years now, the finding that participants were unsatisfied with how the process towards the NCA was managed was somewhat unexpected. The challenge of managing such a process, however, is confirmed by studies done into transition management. Frantzeskaki, Loorbach & Meadowcroft (2012), for instance, found that the dynamic nature of the transition process makes the possibilities for future development and change uncertain, thus making the governance of a transition especially complex and uncertain. Transition management requires the involvement of diverse stakeholder groups, who will have disparate opinions on the required solutions (Loorbach, 2010). In their research into the Dutch Energy Transition, Loorbach, Van der Brugge and Taanman (2008) found that the government had difficulty organizing interaction between niche and regime actors, and did not sufficiently involve private outsiders and civil society. The findings of the current study are in line with these earlier findings, showing that a lack of clear coordination of a participatory process with many actors involved makes it difficult to realize the fundamental and structural changes required for a sustainability transition.

5.2 Theoretical implications

From the main findings of this study, a number of implications for the field of transition research can be drawn. First, the discursive dimension of the Dutch NCA was explored, offering an analysis of the role of language and actors in sustainability transitions in the context of the Dutch industrial transition. Although this approach has been taken to analyze the Dutch energy transition (Bosman et al., 2014), the sustainability transition in the industrial sector, which was the focus of this study, comprises many more actors and complex dynamics, thus presenting an excellent case example of a socio-technical transition. As such, this study provides a first conceptualization of how industrial sector incumbents and environmental organizations position themselves in the (Dutch) sustainability transition.

Additionally, past studies have either analyzed the role of different stakeholder groups in transitions (e.g. Wittmayer et al., 2017) or analyzed the discourses and storylines used by either one of these actor groups (Bosman et al., 2014). This study combined the two, identifying two important stakeholder groups in the transition and subsequently analyzing how they are trying to influence the identification of the problem at the basis of the transition. Though the results from this approach support existing theory on the role of actors in transitions and how they use discourse to relate to policy problems (Hajer, 1995; Leipold & Winkel, 2017), they also suggest that actors from opposing discourse coalitions can share elements of a certain discourse, possibly to relate their own preferences to the language and terms used by a more powerful institution, thus aiming to gain political relevance.

The changes and developments in the discourses and related storylines identified in this study can serve as further predictors for the outcomes of the governance process towards the NCA, as it showed that discourses are responsive to changes in the public and political debate. The current study showed a shift in the viability of the policy option of a CO_2 tax as a result of such changes, providing further support for Litfin's (as cited in Hajer & Versteeg, 2005) statement that identifying discourses and storylines enable prediction of such changes.

As such, the study's findings provide an improved understanding of the policy-making process towards sustainability transitions, in the sense that no prior research has looked at the discursive level of the Dutch sustainability transition. In addition to this, the reconstructed discourses provide a first identification of how the analyzed stakeholder groups conceptualize the sustainability transition and the possible solutions and measures needed to realize it.

5.3 Practical implications

The findings of this study also have implications for practitioners, both in the field of transition governance and media. For the Ministry of EA, which is in charge of managing the sustainability transition, the dissatisfaction expressed by the stakeholders involved suggests that the process towards reaching the agreement at the industry table was not managed according to the principles advocated by transition scholars and practitioners (e.g. Loorbach & Rotmans, 2006). Insufficient transparency and communication about the measures in the agreement may have been a cause for the industrial sector and environmental organizations to be unable to find common ground and reach an agreement. Because compromise, negotiation and cooperation between diverse actor groups are at the core of the Ministry's transition management approach, it is recommended that the criticism expressed by those involved, which was discussed in this study, is taken into account in any future efforts to further the Dutch sustainability transition.

Additionally, the important role played by polarization and politicization in the NCA, that clearly emerged when looking at the change in discourses as well as the results from the interviews, has implications for both the Dutch government and media. The results imply that the entrance into the political and public debate of a complex process like a transition can take away a large portion of the nuance and complexity that is inherent to it. In the case of the NCA, this did not prove beneficial to the negotiations and cooperation that is needed to accomplish a transition. Though it is recommended

that the government takes this into account when communicating to external parties about the transition, the media also has an important role to play here. With the influence that the media can have on the public debate and opinion of complex topics like a transition, comes the responsibility to accurately present both sides of the argument instead of merely highlighting the differences between the parties, polarizing the debate and hindering constructive discussion, which is needed to solve complex societal problems. Thus, it is recommended that journalists inform the public more about the technical complexity of the sustainability transition to promote a more informed debate.

5.4 Research limitations

Several limitations of the research design must be considered when interpreting the results. First of all, this study used qualitative content analysis to a Corpus of existing documents to reconstruct and compare discourses used by stakeholder groups in the NCA. This method, however, relies heavily on the researcher's interpretation and reading of the texts (Macnamara, 2005). To support the qualitative interpretations of the texts, therefore, some frequencies of codes were also included in the results. Despite this, the development of the codebook and the key categories remained dependent on the researcher's interpretation of the text and the elements present in it, as intercoder reliability for the developed codebook could not be calculated. Although intra-coder reliability was obtained, the reproducibility of the codebook used for analysis cannot be fully guaranteed. However, because the discourses were reconstructed using groups and combinations of multiple codes, and these reconstructions were confirmed through the interviews, the results are valid for answering the research questions.

Although the interviews with stakeholders provided additional confirmation of the discourses identified in the content analysis, these also came with their own limitations. The selection of participants for the interviews was largely dependent on the availability and willingness of stakeholders to participate. This, in addition to time constraints, resulted in a limited amount of participants for the interviews. Although the participants covered relevant organizations from both the industrial sector and environmental organization side of the NCA, not all of the relevant organizations could be interviewed, with some refusing or not responding to the request to do so. Thus, the interview results only represent a small proportion of the actors that are part of the discourses. The presence of the researcher during data gathering might have affected the interviewee's respondents, as they might have answered the same questions differently had they been asked at a different moment by a different researcher. This means that no definite conclusions can be drawn based on the data from the interviews, and thus the view of the stakeholders towards the negotiation process and the role of polarization in this can only be hypothesized.

Finally, the 'industry table' of the NCA only provides a case example of the process towards a sustainability transition. Therefore, it is beyond the scope of this study to conclude that the results are representative of and applicable to all similar transition management processes, as these are very complex and highly dependent on context, country and timing. The study, does, however, provide an in-depth look at how the two stakeholder groups discursively positioned themselves towards the Dutch sustainability transition, providing a basis for further research into this phenomenon.

5.5 Suggestions for future research

The case example of the NCA showed to be an interesting and relevant unit of analysis for the field of transition research, calling for further studies into the different sector tables and stakeholder groups that were part of this process. As this study was limited to the industrial sector and environmental organization stakeholders in the agreement, future studies should expand the analysis of stakeholder groups at the industrial sector table to governmental organizations, both at the regional and national levels.

Furthermore, the current study showed that actors from opposing discourse coalitions can share elements of a certain discourse, possibly to relate their own preferences to the language and terms used by a more powerful institution, thus aiming to gain political relevance. Future research should take this finding into account, by investigating whether the Dutch government also shares this discourse, which could offer an explanation for the shared discourse amongst opposing coalitions. In addition to this, further research is needed to establish if this phenomenon of overlapping discursive elements between seemingly opposing groups in transitions can be found in other cases and instances.

An interesting finding that emerged from the interviews, and could thus only be hypothesized, addressed the role of politicization and polarization in the process towards the NCA. This element of the Dutch sustainability transition only emerged in a later stage of the research, and thus requires further investigation to confirm that polarization occurring in the media and the public debate had implications for and effects on the outcomes of the agreement. Future studies into transitions should take this into account, as it can have important consequences for the complex transition process, providing important implications for practitioners in the government and media.

Finally, although this research identified the discourses and arguments shared between the stakeholder groups with the objective to influence the policy decisions made in the NCA, it was not researched what the actors' actual influence on the final policy output was. Once the final NCA has been published, further research should investigate the extent to which each party exerted influence on the agreed measures and how these are linked to the discourses identified in this study.

5.6 Conclusions

This study aimed to identify the major discourses that are present amongst the industrial sector and environmental organization stakeholders in the Dutch National Climate Agreement, whether and how these changed throughout the negotiation process, and, finally, how the stakeholders look back at the process towards the agreement and the role that polarization and politicization played in it. Based on qualitative content analysis of existing documents, strengthened by interviews, it can be concluded that the stakeholder groups share two competing discourses, with the industrial stakeholders sharing a discourse that can be summarized as: 'A sustainable industrial sector, that has effects beyond sector- and national boundaries whilst retaining its competitive position'. The environmental organizations' discourse can be summarized as: 'A true industrial transition, with a new, green, economy in which costs and benefits are distributed equally and disruptive climate change is prevented'. Furthermore, the overlapping discourse can be summarized as: 'An industrial transition, that can have economic benefits if the Netherlands takes the lead in developing sustainable, innovative technologies'.

Actors share particular storyline elements related to these discourses, thereby forming discourse coalitions. Though the results show no significant changes in these discourses and storylines, minor developments at the categorical level of the storylines point to stakeholders' responses to changes in the public debate on the transition. Furthermore, it can be hypothesized that lack of coordination and transparency in the process lead to dissatisfaction with the process amongst stakeholders, hampering the process towards an agreement. Polarization and politicization of the debate may have further complicated the complex transition process. Further research is required to confirm these suggestions.

The two competing discourses that were reconstructed offer further support for previous studies that have been done into the discursive elements of policy-making in transitions, showing that actors form 'discourse coalitions' to align the language and storylines they use to relate to environmental policy problems (Hajer, 2005; Hajer & Versteeg, 2005). Additionally, the overlapping discourse that was reconstructed from the data shows that actors from opposing discourse coalitions can share discursive elements. This raises the question if there is a dominant discourse (Hajer, 2006) on the industrial transition, which is used by political institutions such as the Ministry of EA. As this finding was not anticipated from the existing literature, it calls for further research. The developments

that were identified in these discourses could be linked to the context in which they occurred, showing that the storyline elements of the discourses were responsive to developments at the landscape level of the transition, providing support for the relevance of this level of the transition for the role of actors in this process (Kemp, 2010).

By analyzing the discursive dimension as well as stakeholders' opinion of the process towards the National Climate Agreement, the findings of this study contribute improved understanding of environmental policy-making processes that aim to realize sustainability transitions. Sustainability transitions are complicated processes, requiring cooperation between different actors to work towards a fundamental societal change to a new system (Loorbach, 2010). The core elements of each of the identified discourses show how groups of actors try to influence the definition of the transition and the problems that necessitate it. The results of this study also confirm how challenging and critical proper management of transitions is. Furthermore, these findings provide important practical implications for the governmental institutions managing the sustainability transition, as the hypothesized inefficiency of the negotiation process can be taken into account in future transition management efforts. Additionally, media outlets covering the sustainability transition could aim to inform the public more accurately about the technical complexity of the sustainability transition to promote a more informed debate on the manner.

The current and future importance of the sustainability transition to reach climate objectives calls for closely studying how these processes are influenced and governed. The current study focused on the National Climate Agreement to study transition stakeholders and their discursive strategies. As such, it contributes a first conceptualization of how stakeholder groups in this transition process used discourses to relate to and influence the sustainability measures needed to tackle the climate problem. Changes and shifts in these discourses and their link to polarization in the public debate support earlier literature on transitions, showing that analyzing these can give valuable insights to transition scholars. Finally, the hypothesized influence of polarization and politicization on the outcome of the NCA calls for further investigation of these factors and their role in transition processes, and the Dutch government should be aware of what these influences imply. Against this background, the National Climate Agreement has shown to be a unique example of the Dutch governance approach to transitions, providing a promising case example for future transition research.

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APPENDIX A. LITERATURE STUDY LOG

1. Research questions literature study

To conduct the literature study, four sub questions were formulated:

- Sub question 1: *What different stakeholders are involved in the discourse around the National Climate Agreement?*
    - Concepts in sub question 1: stakeholders, discourse, climate (agreement)
- Sub question 2: *How is the discursive agency approach applied in research on climate policy?*
    - Concepts in sub question 2 : discursive agency, discourse, agency, climate policy
- Sub question 3: *How are stakeholders involved in (Dutch) environmental policy?*
    - Concepts in sub question 3: stakeholders, environmental policy making, Dutch
- Sub question 4: *What research has been done into the Dutch sustainability transition?*
    - Concepts in sub question 4: sustainability transition, Dutch

2. Criteria preferred materials

For each research question, the preferred materials were both books and articles, with no limit to the years from which they were from, though more recent materials (from the past 10 years) were preferred. For sub question 4, one of the search actions specified that the results should show materials from 2018 and 2019, as the main goal of this search action was to find the most recent knowledge on the Dutch sustainability transition. The language of the materials should be English, as this is the language in which the theoretical framework is written and thus the most relevant.

3. Selected databases

The databases selected for this research are Scopus, Web of Science and Google Scholar. All of these databases focus on multidisciplinary research, which is suitable for the current literature study as both literature from the social sciences (e.g. on stakeholder theory) and from policy and transition research are relevant for answering the questions to be addressed in the literature study. Using multidisciplinary databases with both peer-reviewed articles and books allows for a thorough search through all available literature, with the option to select research from one or multiple of the abovementioned research disciplines.

4. Relevant terms- Search matrixes

Sub question 1

Concepts	**Related terms**	**Smaller terms**	**Broader terms**
X= stakeholders	stakeholder, stakeholder analysis, actors, interest groups	government, lay people, corporations, politicians	stakeholders
Y= discourse	representation, attitudes, values, framing	discourse	climate discourse
Z= climate (agreement)	climate change, climate policy, climate communication, policy support	environment	climate agreement, Dutch climate policy, national climate agreement

Sub question 2

Concepts	Related terms	Smaller terms	Broader terms
X= discursive	discourse, analysis, attitudes, values	Discursive agency approach	Discourse
Y= agency	Representation, responsibility, legitimacy		Actors, stakeholders
Z= climate policy	sustainability governance, environmental governance	climate policy making	governance, policy

Sub question 3

Concepts	Related terms	Smaller terms	Broader terms
X= stakeholder involvement	actors, stakeholder involvement, stakeholder theory, participation	public participation	stakeholder
Y= environmental policy making	climate, environment, policy making, climate policy making, climate governance	environmental policy, climate policy	Policy making, governance
Z= Dutch	The Netherlands	Dutch government	

Sub question 4

Concepts	Related terms	Smaller terms	Broader terms
X= sustainability transition	sustainable transition, environment, energy transition	industrial transition	transition
Y= Dutch	Netherlands	Dutch government	

5. Search actions

Sub question 1				
	Date	**Database**	**Search action + search technique**	**Total hits**
1	2/10/2019	Scopus	SUBJAREA (arts OR busi OR deci OR econ OR psyc OR soci) (TITLE-ABS-KEY (stakeholder) OR TITLE-ABS-KEY (stakeholders) OR TITLE-ABS-KEY (stakeholder AND analysis) OR TITLE-ABS-KEY (actors) OR TITLE-ABS-KEY (interest AND groups) OR TITLE-ABS-KEY (government) OR TITLE-ABS-KEY (lay AND people) OR TITLE-ABS-KEY (corporations) OR TITLE-ABS-KEY (politicians) AND TITLE-ABS-KEY (discourse) OR TITLE-ABS-KEY (representation) OR TITLE-ABS-KEY (attitudes) OR TITLE-ABS-KEY (values) OR TITLE-ABS-KEY (values) OR TITLE-ABS-KEY (framing) OR TITLE-ABS-KEY (climate AND discourse) AND TITLE-ABS-KEY (climate AND change) OR TITLE-ABS-KEY (climate AND policy) OR TITLE-ABS-KEY (climate AND communication) OR TITLE-ABS-KEY (policy AND support) OR TITLE-ABS-KEY (environment) OR TITLE-ABS-	33,167

			KEY (climate AND agreement) OR TITLE-ABS-KEY (dutch AND climate AND policy) OR TITLE-ABS-KEY (national AND climate AND agreement)) Technique: turn search matrix into search string	
2	8/10/2019	Scopus	(TITLE-ABS-KEY (stakeholder) OR TITLE-ABS-KEY (stakeholders) OR TITLE-ABS-KEY (stakeholder AND analysis) OR TITLE-ABS-KEY (actors) OR TITLE-ABS-KEY ("interest groups") OR TITLE-ABS-KEY (government) OR TITLE-ABS-KEY ("lay people") OR TITLE-ABS-KEY (corporations) OR TITLE-ABS-KEY (politicians) AND TITLE-ABS-KEY (discourse) OR TITLE-ABS-KEY (representation) OR TITLE-ABS-KEY (attitudes) OR TITLE-ABS-KEY (values) OR TITLE-ABS-KEY (values) OR TITLE-ABS-KEY (framing) OR TITLE-ABS-KEY (climate AND discourse) AND TITLE-ABS-KEY ("climate change") OR TITLE-ABS-KEY ("climate policy") OR TITLE-ABS-KEY ("climate communication") OR TITLE-ABS-KEY ("policy support") OR TITLE-ABS-KEY (environment) AND TITLE-ABS-KEY ("climate agreement") OR TITLE-ABS-KEY (dutch AND climate AND policy) OR TITLE-ABS-KEY (national AND climate AND agreement)) Technique: turn search matrix into search string Needed less results so used more search aspects with AND	99
3	8/10/2019	Web of science	**TITLE:**(stakeholder*) *OR* **TITLE:**("stakeholder analysis") *OR* **TITLE:**("interest groups") *AND* **TITLE:**(discourse) *OR* **TITLE:** (attitudes) *AND***TITLE:** ("climate change") *OR* **TITLE:**("climate policy") *OR* **TITLE:** ("climate communication") *AND* **TITLE:**("climate agreement") *OR* **TITLE:**("dutch climate policy") *OR* **TITLE:**("national climate agreement") **Timespan:** All years. **Indexes:** SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI. Technique: Turn search matrix into search string Needed les results so limited the amount of indexes that were searched for this string.	11,309
4	17/10/2019	Scopus	Refined to: LIMIT-TO (SUBJAREA , "SOCI") What future for the voluntary carbon offset market after Paris? An explorative study based on the Discursive Agency Approach Lang S., Blum M., Leipold S. (2019) Climate Policy, 19 (4) , pp. 414-426. → Documents that share references with an article found in search 2. Technique: Snowballing. Refined the subject area, looked at documents that shared references with a relevant article from a previous search.	2,654

			Sub question 2	
5	18/03/2019	Scopus	(TITLE-ABS KEY (discursive AND agency AND approach) AND TITLE-ABS-KEY (climate AND policy) OR TITLE- ABS-KEY (policy*) OR TITLE-ABS- KEY (environmental AND governance) OR TITLE- ABS- KEY (sustainability AND governance) AND TITLE- ABS-KEY (actors) OR TITLE-ABS- KEY (stakeholders)) Technique: Turn search matrix into search string.	42
			Sub question 3	
6	18/03/2019	Scopus	(TITLE-ABS-KEY (stakeholders) OR TITLE-ABS- KEY (actors) OR TITLE-ABS- KEY (policy AND making) AND TITLE-ABS- KEY (stakeholder AND theory) AND TITLE-ABS- KEY (participation) OR TITLE-ABS- KEY (public AND participation) AND TITLE-ABS- KEY (environmental AND policy AND making) OR TITLE-ABS-KEY (climate AND policy) OR TITLE- ABS-KEY (environmental AND policy)) Technique: Turn search matrix into search string.	134
7	22/03/2019	Scopus	(TITLE-ABS- KEY (stakeholder AND involvement) AND TITLE- ABS-KEY (policy AND making) OR TITLE-ABS- KEY (policy) OR TITLE-ABS- KEY (environmental AND policy) AND TITLE-ABS- KEY (stakeholders) OR TITLE-ABS- KEY (actors) OR TITLE-ABS- KEY (stakeholder AND theory)) Technique: Turn search matrix into search string. Needed some more results, so added a few extra search terms.	295
8	22/03/2019	Google Scholar	“stakeholder involvement” “decision making” “netherlands” Technique: Turn search matrix into search string.	148,000
			Sub question 4	
9	30/03/2019	Scopus	(TITLE-ABS- KEY (sustainable AND transition) AND TITLE-ABS- KEY (dutch) OR TITLE-ABS-KEY (netherlands)) Technique: Turn search matrix into search string.	290
10	9/04/2019	Scopus	(TITLE-ABS-KEY ("sustainability transition") OR TITLE-ABS-KEY ("sustainable transition") AND TITLE-ABS- KEY (dutch) OR TITLE-ABS- KEY (netherlands)) AND (LIMIT- TO (PUBYEAR , 2019) OR LIMIT- TO (PUBYEAR , 2018)) Technique: Turn search matrix into search string. Needed results from the past 2 years, so limited the timespan to this.	17

6. Found references in APA style

A selection of the references found using the above searches is presented below. Other references that were found during the study, either through snowballing or other search strings, can be found in the full reference list of this report.

Sub question 1

Hajer, M. A. (1995). *The politics of environmental discourse: ecological modernization and the policy process*. Oxford: Clarendon Press.

Jernnäs, M., & Linnér, B. O. (2019). A discursive cartography of nationally determined contributions to the Paris climate agreement. *Global Environmental Change*, *55*, 73-83. https://doi.org/10.1016/j.gloenvcha.2019.01.006

Wittmayer, J. M., Avelino, F., van Steenbergen, F., & Loorbach, D. (2017). Actor roles in transition: Insights from sociological perspectives. *Environmental Innovation and Societal Transitions*, *24*, 45-56. https://doi.org/10.1016/j.eist.2016.10.003

Sub question 2

Foucault, M. (1982). The subject and power. *Critical Inquiry*, *8*(4), 777-795. https://doi.org/10.1086/448181

Leipold, S., & Winkel, G. (2016). Divide and conquer—Discursive agency in the politics of illegal logging in the United States. *Global Environmental Change*, *36*, 35-45. https://doi.org/10.1016/j.gloenvcha.2015.11.006

Leipold, S., & Winkel, G. (2017). Discursive agency: (Re-)conceptualizing actors and practices in the analysis of discursive policymaking. *Policy Studies Organization The Policy Studies Journal*, *45*(3), 510-534. https://doi.org/10.1111/psj.12172

Sub question 3

Edelenbos, J. (1999). Design and management of participatory public policy making. *Public Management an International Journal of Research and Theory*, *1*(4), 569–576. https://doi.org/10.1080/14719039900000027

Edelenbos, J., & Klijn, E.H. (2006). Managing stakeholder involvement in decision making: A comparative analysis of six interactive processes in the Netherlands. *Journal of Public Administration Research and Theory*, *16*(3), 417–446. https://doi.org/10.1093/jopart/mui049

Fischer, L. B., & Newig, J. (2016). Importance of actors and agency in sustainability transitions: A systematic exploration of the literature. *Sustainability, 8*(5). https://doi.org/10.3390/su8050476

Sub question 4

Kemp, R. (2010). The Dutch energy transition approach. *International Economics and Economic Policy*, *7*(2-3), 291-316. https://doi.org/10.1007/s10368-010-0163-y

Loorbach, D., Van der Brugge, R., & Taanman, M. (2008). Governance in the energy transition: Practice of transition management in the Netherlands. *International Journal of Environmental Technology and Management*, *9*(2-3), 294-315. doi:10.1504/IJETM.2008.019039

Loorbach, D., & Verbong, G. P. J. (2012). Conclusion : is governance of the energy transition a reality, an illusion or a necessity? In G. P. J. Verbong, & D. Loorbach (Eds.), *Governing the energy transition : reality, illusion or necessity?* (pp. 317-335). Retrieved from: https://www.researchgate.net/publication/241853605_Governing_the_Energy_Transition_Reality_Illusion_or_Necessity

Ottens, M., & Edelenbos, J. (2019). Political leadership as meta-governance in sustainability transitions: A case study analysis of meta-governance in the case of the Dutch national agreement on climate. *Sustainability*, *11*(1), 110. https://doi.org/10.3390/su11010110

Rotmans, J., Kemp, R., & Van Asselt, M. (2001). More evolution than revolution: transition management in public policy. *Foresight*, *3*(1), 15-31. https://doi.org/10.1108/14636680110803003

7. Reflection

I identified relevant search terms by starting with a broader scope of articles and once I found a number of relevant terms I used these for further search actions. To orientate myself on the research subject, I skimmed through the abstracts of some articles I found, looking at the key terms and concepts that were discussed in them. This helped in finding more relevant search terms and specifying my searches more. I found that terms like 'transition' and 'environmental policy' were important in finding relevant sources for my literature study, as I found through reading of some articles that these were at the core of my research subject. Especially the term 'transition' was different from those I initially used, as I first only focused on the concepts of discourse and stakeholders. Limiting this information to (sustainability) transitions helped me find sources that were more specific and applicable to my research topic. I assessed the quality of my sources by looking at how current they were, with a preference for articles and books that were published in the past 10-15 years, though, in some cases older literature was more relevant. I read the abstract to find out if the source was relevant for my study, and if this seemed to be the case I read the introduction and conclusion, consulting the theoretical framework of the research for further relevant literature for my study. Additionally, I looked at the type of research that was performed to assess the quality of the source. The database that was most relevant and important to my literature study was Scopus, as I found the search options in this database very convenient, allowing for detailed specifications. The results were multidisciplinary, which was very suitable for my research subject. After collecting a number of relevant articles, I found that journals like 'Climate Policy' and 'Environmental Innovation and Societal Transitions' provided me with a lot of relevant references, causing me to look further into these journals and the articles published in them.

To orient myself on the broader scope of my topic and find specific information on specific subjects in my study, I used the technique of converting my search matrix to a search string. Here, I also used phrasing and truncation to further specify or elaborate my search strings. In some cases, I used filters for certain research disciplines, time spans or document types. Although sometimes I ended up with a very large amount of sources, I still found that scanning the titles of each source and further specifying my search string helped me find a number of relevant sources. When I found suitable articles, I used the suggested related articles from Scopus, as well as the references within the relevant articles to 'snowball' into further relevant sources. For instance, I used the article by Jernnäs and Linnér (2019) to find sources for existing discourses on environmental policies. This was very helpful in expanding my list of relevant sources and allowed me to find qualitative good information. Although this technique helped me structure a relevant and interesting theoretical framework, it did not feel like a very structured way of collecting sources. In the future, I would aim to take a step back more often, trying new searches based on relevant articles I found, to make my literature search a bit more structured and comprehensible.

APPENDIX B. CODEBOOK

Category	Codes	Definition
Attitude (towards NCA)	Ambitious	NCA is an ambitious effort that offers unique opportunities. The Netherlands is leading in Europe/ the world with this approach.
	Challenging	The aim of the NCA to effect a transition is a challenging one.
	Inconcrete	Plans in the NCA are not concrete enough. E.g. no concrete choices have been made about the techniques required, no concrete plans for how to finance the plans.
	Insufficient	NCA will not reach emission reduction targets set at the beginning of negotiations. Agreement should be more ambitious in the goals and policies it proposes.
	Sufficient	NCA will reach emission reduction targets set at the beginning of the negotiations.
Benefits and opportunities	'Green' economy and jobs	Transition will lead to a new, green economy, where new jobs will be created and other economic benefits will be realized. Green technologies can be more cost-efficient.
	Decrease emissions	Proposed measures and/or envisioned technologies will lead to emission reductions.
	Innovative technologies	Transition and climate policies can result in new, green, innovative technologies. The Netherlands can be leading in this.
Risks	Deteriorated competitive position	Measures proposed by other parties will cause deterioration of industry or companies' competitive position, because they are operating in an international market.
	Insufficient funds for investments	Sustainable solutions that are required to decrease emissions are relatively expensive and not profitable.
	Loss of jobs and economic welfare	Measures proposed by other parties will cause job loss or deterioration of national economy.
	No (global) emission reductions	Measures proposed by other parties will not have the desired emission reduction effects, either nationally or globally.
	Temporary, uncertain measures	Measures will not lead to true innovation and transition. Measures or technologies are too uncertain.
	Unequal cost distribution	Proposed/current measures lead to unequal distribution of costs and benefits of transition.
Financing (of transition)	Government	Financing of the industrial transition should be (partially) subsidized by the government.
	Industry	Industry should pay a fair share of the costs of the transition.

Industry	Efficient/ sustainable	Dutch industry is already one of the most sustainable in the world/ Europe and is leading in this area.
	Important	Industry provides a lot of value to the economy, provides jobs, has a large share in the Dutch export, etc.
	Innovative	Industry has great plans to innovate for more sustainable production processes and is ambitious in its activities.
	Irresponsible	Industry gets a large amount of the subsidy, but does not take enough responsibility for the costs and measures required for the transition.
	Responsible	Industry pays a large amount of the costs, is ambitious in its plans and does not get a large portion of subsidy. Aims to contribute to the emission reduction goals.
Role of government	Legislate and lead	Government should take responsibility and leadership. Effect strict rules and laws that lead to an actual transition, where costs are equally distributed.
	Support and cooperate	Government should support sustainable innovations, cross-sectoral programs, etc. (often in the form of subsidies)
Motivation for supporting transition	Agreement	Reaching the goals set in the Paris and/or National Climate agreement.
	Climate change	Concern about the climate crisis and the effects it will have on current and future generations.
	Economic viability	Transition can have economic benefits, if carried out correctly. Important to keep the economic effects of sustainability measures as a basis, and to make sure they do not harm, but instead benefit the competitive position.
	Urgency of problem	Climate change is an urgent problem and threat, and measures should thus be efficient and quick.
Policy preference	Bonus-malus	System that gives an incentive to industrial companies to innovate, by rewarding them for sustainable activities and fining them when they do not reach their proposed plans.
	International measures	Dutch industry sector operates in the world market, national policies will harm competitive position and will not help reduce global emissions.
	National CO_2 tax	Measure that forces industry to become sustainable.
	Subsidies	Subsidies for techniques and investments that are too expensive (as compared to their non-sustainable counterparts) for industrial companies to finance themselves. E.g. SDE+, SDE ++
Requirements	Avoid carbon leakage	Ensure that the leakage of industrial activities from NL to other countries as a result of climate policy is avoided.
	Competitive position	Maintain and/or utilize the Netherlands and the industrial sector's competitive position.
	Cooperation between parties	Cooperation between and compliance of all parties with the agreement and the proposed measures is instrumental in reaching reduction targets.
	Fair distribution	The costs and benefits of the transition should be fairly distributed between industry, citizens and SMEs.

	NL as leader	Netherlands should be leading and ambitious in its climate policies, as compared to other countries.
	Societal support	Successful climate agreement and transition require societal report.
	Stimulate truly sustainable solutions	Technologies that do not truly contribute to structural sustainable solutions should not be subsidized. Need for stimulation of sustainable solutions. Emphasis on 'actual' green measures instead of short-term techniques such as CCS.
Solutions	CCS/CCU	Carbon Capture and Storage and/or Carbon Capture and Utilization as important solutions to reach the goals in the agreement and effect a transition.
	Cross-sectoral measures	Measures that have influence across sectors and stimulate the 'circular economy'.
	Electrification	Electrification as a technical measure to reduce emissions and effect the industrial transition.
	Green hydrogen	Green hydrogen is an innovative technology that is necessary to reach the desired goals and industrial transition.
	Innovation	Technological innovation for sustainable development should be stimulated.
	Long-term investments	Long term investments are required to accomplish transition. These will take time for industrial sector companies to earn back.
Vision	Industrial transition	Future industry will be mostly or fully based on renewable sources. The Netherlands is heading for an 'industrial / energy transition'.
	International transition	The goal of a transition should not be limited to the Netherlands, only when an international perspective is taken will climate measures be effective.
	Cross-sectoral transition	Sustainability transition (and NCA) should be cross-sectoral, e.g. by looking at the impact that each sector has on emissions of other sectors.
	Drastic transition	Need for a fast and 'real' transition to a renewable-based industry that no longer depends on fossil fuels. Need for structural change.

APPENDIX C. INTERVIEW QUESTIONS

Introduction before interview

- Doel van onderzoek en interview:
    - Een beeld geven van de dominante discourses en verhaallijnen die gebruikt worden door de industriepartijen en milieuorganisaties met betrekking tot het Klimaatakkoord en de duurzame/energietransitie als geheel.
    - Door middel van een interview wil ik de resultaten die ik uit de analyse van documenten ga halen verder aanscherpen, uitdiepen en bevestigen.
- Ik zal de data van het onderzoek alleen gebruiken om mijn onderzoeksvraag te beantwoorden. Het onderzoek is goedgekeurd door de ethische commissie van mijn universiteit, de data zal volledig geanonimiseerd worden zodat deze niet terug te traceren is op de persoon en, indien gewenst, de organisatie.
- Ik wil van tevoren graag uw verbale consent vragen om de audio van het interview op te nemen, u kan zich op elk moment terugtrekken uit het onderzoek of 'off the record' gaan. De opname zal aan het eind van het onderzoek permanent verwijderd worden.

Interview 1 and 2: Industrial sector

<u>Deel 1: Rol geïnterviewde in klimaatakkoord</u>

- Wat was uw rol binnen de onderhandelingen voor het klimaatakkoord?
- Is uw rol gedurende de onderhandelingen nog veranderd?

<u>Deel 2: Klimaatakkoord: motivatie en maatregelen</u>

- Met welke reden is Organisatie X aangeschoven om te onderhandelen voor het ontwerp klimaatakkoord?
- Hoe stond Organisatie X in de onderhandelingen?
- Heeft deze houding zich ontwikkeld door de onderhandelingen heen, en zo ja, hoe?
- Wat vindt u/ Organisatie X van de doelstellingen waar het akkoord aan moet gaan voldoen? (tussendoel 49% reductie in 2050, 14,3 MT reductie voor de industrie).
- Hoe kijkt u naar de inhoud van het ontwerp van het klimaatakkoord (OKA)?
    - Zijn de plannen die erin staan voldoende om de doelen te behalen?
    - Heeft de industrie -in uw ogen- concessies moeten doen om tot het ontwerpakkoord te komen?
    - Staan er maatregelen in het akkoord die beter of anders hadden gekund? Of bent u helemaal tevreden met wat er allemaal staat?

<u>Deel 3: Rol van industrie en overheid</u>

- Hoe ziet u de rol van de) industrie in het behalen van de reductiedoelen en het bewerkstelligen van een transitie?
    - Kan de industrie de doelen halen?
    - Wat is er nodig (aan technieken, investeringen, e.d.) om deze doelen te behalen en de industrietransitie te bewerkstelligen?
        - Volgens de milieubeweging is CCS maar een tijdelijke maatregel, die -als deze gesubsidieerd wordt- echte duurzame technologieën zoals groene waterstof in de weg staat, wat is uw reactie hierop?
- Draagt de industrie in uw ogen voldoende bij aan het financieren van de investeringen die nodig zijn om deze doelen te behalen?
- Welke kansen biedt de 'systeemtransitie/ industrietransitie' voor de industrie?
    - Welke kansen en voordelen biedt de transitie voor Nederland?
- Wat veel voorbijkomt is de behoefte van de industrie aan een *level playing field* om de internationale concurrentiepositie te behouden. Wat is het belang hiervan en met welke maatregelen kan dit worden gewaarborgd?
- Welke rol moet de overheid volgens u spelen in het behalen van de doelen en realiseren van de plannen?
- Hoe kunnen de lusten en lasten van het klimaatbeleid eerlijk verdeeld worden?

Deel 4: CO2-heffing & bonus-malus

Uit de doorrekening van het ontwerp akkoord door het PBL blijkt dat de plannen voor de industrie onvoldoende zouden zijn om de gewenste emissiereductie te behalen (slechts 43 procent reductie). In reactie daarop kondigde het kabinet de invoering van een CO2-heffing aan.

- Wat vindt u van deze ontwikkeling? Was dit een verrassing voor de industrie?
- Het PBL had vooral kritiek op de concreetheid en normering van het bonus-malus systeem, ze uitten onzekerheid over vormgeving van en reactie van bedrijven op deze regeling. Hoe ziet u dit?
- Wat zijn de voordelen van het bonus-malus systeem, op welke manier kunnen hiermee de reductiedoelen worden behaald?
- In hoeverre ziet u mogelijkheden voor een CO2-heffing?
    - De 'grote 12' hebben expliciet hun zorgen geuit over zo'n 'platte' heffing, maakt de gehele industrie zich hier zoveel zorgen over?
- Wat zijn de voordelen van een bonus-malus t.o.v. een CO2-heffing?
- Hoe kan de industrie meer zekerheid bieden dat de reductiedoelen worden gehaald?

Deel 5: Terug- en vooruitblik

- Hoe kijkt u terug op de onderhandelingen en uitkomsten hiervan?
    - Is het zoals Organisatie X had verwacht/ had gehoopt?
- Hoe kijkt u naar de standpunten van de milieubeweging en hun rol in de onderhandelingen?
- Heeft u het gevoel dat er bepaalde veranderingen zijn geweest in de bereidheid van Organisatie X om bepaalde maatregelen in het akkoord te zetten?
    - Zijn de milieubeweging en de industrie nader tot elkaar gekomen of is er alleen maar meer verdeeldheid?
- Hoe schat u de kans van slagen van het akkoord in? Gaan de doelen behaald worden?
- Welke rol speelde polarisatie en beeldvorming in de media het Klimaatakkoord?

Interview 3: Environmental organization

Deel 1: Rol geïnterviewde in klimaatakkoord

- Wat was uw rol binnen de onderhandelingen voor het ontwerp klimaatakkoord?
- Is uw rol gedurende de onderhandelingen nog veranderd?

Deel 2: Klimaatakkoord- motivatie en maatregelen

- Met welke reden is Organisatie X aangeschoven om te onderhandelen over het ontwerp klimaatakkoord?
- Hoe stond Organisatie X in de onderhandelingen?
    - Wat wilde ze bereiken? (niet zo expliciet stellen, maar wel zorgen dat dit duidelijk wordt)
    - Had u aan het begin het gevoel dat de onderhandelingen zouden slagen, dat de doelen bereikt zouden worden?
- Heeft deze houding zich ontwikkeld door de onderhandelingen heen, en zo ja, hoe?
- Hoe ziet u de doelen die gesteld werden aan het begin van het akkoord?
    - Waren deze toereikend om het akkoord van Parijs te halen? Zo niet: waarom schoof u dan alsnog aan?
        - De milieubeweging ging er voor mijn idee in met het idee dat die 49% niet gehaald zou worden en niet genoeg was.

Deel 3: Verlaten van onderhandelingen en alternatieven voor OKA

- Vlak voor het ontwerpakkoord afgelopen december werd uitgebracht, stapte u- samen met de FNV en de rest van de milieubeweging- uit de onderhandelingen voor het akkoord. Waarom heeft Organisatie X hiervoor gekozen?
- U stapte erg duidelijk en hard uit de onderhandelingen, met termen als 'vleugellam' en 'boterzacht', waarom koos de milieubeweging ervoor om het op zo'n harde manier te doen?
- Wat waren de grootste punten van kritiek op het ontwerpakkoord?
    - Welke maatregelen zijn echt niet voldoende en waarom?

- Welke maatregelen zijn er nodig om de reductiedoelen wel te halen?
- Hoe kunnen de lusten en lasten van het klimaatbeleid eerlijk verdeeld worden?
- Organisatie X (en de rest van de milieubeweging) benadrukt dat er een 'echte transitie naar een duurzame samenleving' moet komen. Hoe ziet deze eruit en waarom is het OKA volgens u niet toereikend om deze te bewerkstelligen?
- Organisatie X en de andere milieuorganisaties- zijn kritisch over het gebruik van CCS om CO2-uitstoot terug te dringen, hiervoor staat een indicatieve 7 MT reductie in het ontwerp klimaatakkoord, volgens de industrie is CCS nodig om de doelen te halen en staat het andere technieken niet in de weg. Hoe ziet u dit?
    - Welke technieken en maatregelen zijn er volgens u nodig als alternatief voor CCS?

<u>Deel 4: CO2-heffing & bonus-malus</u>

Uit de doorrekening van het ontwerp akkoord door het PBL blijkt dat de plannen voor de industrie onvoldoende zouden zijn om de gewenste emissiereductie te behalen (slechts 43 procent reductie). In reactie daarop kondigde het kabinet de invoering van een CO2-heffing aan.

- Wat vindt u van deze ontwikkeling?
- Het PBL had vooral kritiek op de concreetheid en normering van het bonus-malus systeem, ze uitten onzekerheid over vormgeving van en reactie van bedrijven op deze regeling. Deze kritiek werd bevestigd door de milieubeweging. Kunt u uitleggen waarom het bonus-malus systeem niet toereikend is?
- Als alternatief voor het bonus-malus systeem stelt u een boetesysteem voor, waar een generieke CO2-heffing een belangrijk onderdeel van is. Op welke manier worden hiermee de doelen van het akkoord wel behaald?
    - Hoe worden bedrijven met dit systeem meer geprikkeld om te verduurzamen?
    - De industrie reageerde heftig op deze plannen, Tata Steel sprak zelfs over faillissement als gevolg van zo'n maatregel, VNO-NCW dreigde met het 'weglekken van CO2' doordat bedrijven naar andere landen zouden verhuizen. Wat is uw reactie op deze zorgen vanuit de industrie?
- U bent na deze ontwikkeling weer aan tafel geschoven. Waarom?
    - Kunt u iets vertellen over wat er in de tussentijd is gebeurd?
- Verwacht u dat de maatregelen in het akkoord beter/bindender gaan worden nu het kabinet een toenadering heeft gedaan?

<u>Deel 5: Rol van industrie en overheid</u>

- Hoe ziet u de rol van de industrie in het behalen van de reductiedoelen en het bewerkstelligen van de transitie?
- Draagt de industrie in uw ogen voldoende bij aan het financieren van de investeringen die nodig zijn om deze doelen te behalen? Neemt de industrie voldoende verantwoordelijkheid?
- Welke kansen biedt de 'duurzame/ industrietransitie' voor de industrie/ voor Nederland?
- Wat veel voorbijkomt is de behoefte van de industrie aan een *level playing field* om de internationale concurrentiepositie te behouden. Hoe kan dit volgens u worden gewaarborgd?
- Welke rol moet de overheid volgens u spelen in het behalen van de doelen en realiseren van de plannen?

<u>Deel 6: Terug- en vooruitblik</u>

- Hoe kijkt u terug op de onderhandelingen en uitkomsten hiervan?
- Heeft u het gevoel dat er bepaalde veranderingen zijn geweest in de bereidheid van industriepartijen om bepaalde maatregelen in het akkoord te zetten?
    - Zijn de milieubeweging en de industrie nader tot elkaar gekomen of is er alleen maar meer verdeeldheid?
- Hoe schat u de kans van slagen van het akkoord in? Is er een kans dat de milieubeweging het akkoord alsnog zal steunen? En dat de industrie ook blijft zitten?
- Gaan de reductiedoelen behaald worden?
- Welke rol speelde polarisatie en beeldvorming in de media het Klimaatakkoord?