

SONNET – SOCIAL INNOVATION IN ENERGY TRANSITIONS

Co-creating a rich understanding of the diversity, processes, contributions, success and future potentials of social innovation in the energy sector

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RESEARCH REPORT ON 'FRAMINGS AGAINST FOSSIL FUEL ENERGY PATHWAYS' IN THE NETHERLANDS



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 837498

About SONNET: SONNET is a research project that aims to develop an understanding of diversity, processes, contributions and future potential of social innovation in the energy sector. It is co-funded by the European Commission and runs for three years, from 2019-2022. The SONNET consortium consists of 12 partners across Europe, including academics and city administrations. For more information, please visit our website: <https://sonnet-energy.eu>

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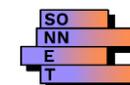
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1 FORWARD

SONNET (Social Innovation in Energy Transitions) brings diverse groups together to make sense of how social innovation can bring about a more sustainable energy sector in Europe. The project aims to co-create a rich understanding of the diversity, processes, contributions, successes and future potentials of social innovation in the energy sector (SIE). We define SIE as combination of ideas, objects and/ or actions that change social relations and involve new ways of doing, thinking and/ or organising energy. As part of this work, we make use of an embedded case study approach to build a better understanding of the development of diverse SIE-fields (e.g. participatory incubation and experimentation, framings against specific energy pathways, local electricity exchange) over time. Our research questions that frame the case study work are:

- How do SIEs and SIE-fields emerge, develop and institutionalise over time?
- How do SIE-field-actors and other field-actors interact with the ‘outside’ institutional environment and thereby co-shape the SIE-field over time?
- What are the enabling and impeding factors for SIE-field-actors and other field-actors to conduct institutional work and change the ‘outside’ institutional environment?

A SIE-field is an arena/space that includes a specific SIE as well as SIE-field-actors working on it and other field-actors enabling and/or impeding it. In this arena/ space these actors take one another and their actions into account and have a shared (but not necessarily consensual) understanding of a SIE and of their relationship to other actors. They recognise (but not necessarily follow) shared norms, beliefs and rules. SIE-fields are often not homogenous but are composed of actors with diverse and contradictory aims and interests. An example: The UK cooperative energy field includes SIE-initiatives and SIE-field-actors (e.g. Brighton Energy Co-op, Cooperative UK, Community Energy England, UK Government, City of Brighton), who have a shared understanding of an SIE, which exists as ‘organising under cooperative principles to generate renewable energy’.

The structure of this report is as follows. Section 2 provides a summary of the SIE-field relevant for this report and lists some key insights. Section 3 outlines the boundaries of the SIE-field and shows how it has been studied in the country context. Section 4 shows a visual development of the SIE-field. Section 5 tells the historical development of the SIE-field over time, including analytical/ interpretive reflections from the SONNET researchers and quotes from the actors

involved in the field developments. Section 6 outlines key research findings, providing answers to the three research questions. Section 7 outlines recommendations for policymakers based on the findings. Finally, Section 9 outlines the methodological approach and includes a more detailed timeline of the SIE-field and its actors.

2 'Framings against fossil fuel energy pathways' in the Netherlands

In SONNET, we investigate the development of the SIE-field called 'framings against fossil fuel energy pathways'. This involves tracing the creation and development of different framings against energy pathways centred on fossil fuels, such as coal or natural gas. Such framings can originate from multiple actors, such as NGOs, network organizations, protest groupings and local initiatives (all of these can be more or less formal) that work locally, regionally, nationally but also internationally. Their explicit or implicit aim with these framings is to change dominant (societal) discourses about existing energy pathways, influence policymaking and/ or 'stop' local fossil fuel production. These framings can contain what is considered problematic about fossil fuels, such as environmental damage or safety issues during extraction or CO₂-emissions and possibly envisioned alternative futures, such as renewable energy production.

This historical account (2009-2020) outlines the emergence and development of three specific framings in the Netherlands: anti-Groningen gas extraction, anti-fracking and divestment.

Key insights

For the SONNET project, the '*Framings against fossil fuel energy pathways*' is particularly interesting because it focuses in first instance on the role of ideas and framings in energy systems and also on 'conflicts' (rather than cooperation, exchange and competition) as a defining feature of social interactions. In doing so, it reveals several important issues for social innovation in energy transitions. It illustrates that:

- In the Netherlands, framings against shale-gas extraction and gas extraction in the Groningen field and the associated activities have been very important in stopping gas extraction in Groningen and shale-gas exploration in the Netherlands. Divestment framings were picked up widely and increased awareness about finance as an important instrument against fossil fuel industry.
- The legitimacy of SIE-field actors engaging in 'framings against fossil fuel energy pathways' resides in the amount of people that they can mobilise with their frames: whether as members of an association, participants in a torchlight procession or as signees of an online petition. It also resides in their ability to combine different activities such as

sitting at the negotiation table with more radical activities, such as civil disobedience actions.

- Success can partly be traced back to the collaboration of actors with similar goals but different interests: those with local interests related to housing and safety, and those with (inter)national climate ambitions related to environmental safety and the utility and necessity of gas in future energy mixes.
- Taking legal action against incumbent actors and their activities was an important aspect of the activities of SIE-field actors. Through taking local or national governments or incumbent industry to court, legal precedence was created. Legal action legitimised claims and frames put forth by SIE-field actors and also increased public attention to the frames through media coverage.
- SIE-fields are centred around a handful of important individuals, who start to translate a seemingly private issue into an issue of public concern: the question of what is financed with one's pension savings or the question of living in an area of ground movement.
- Tracing the emergence and development of these framings over a period of just more than 10 years, shows that frames co-develop with broader societal trends or regulatory and policy events and successes. Anti-Groningen gas frames for example developed from reducing gas extraction to stopping gas extraction, and divestment frames developed from a focus on financial ties between public organisations and fossil-fuel industry to including also other kind of ties.

3 Introduction to ‘Framings against fossil fuel energy pathways’ in the Netherlands

In SONNET, we investigate the development of the SIE-field and its SIE (see box ‘SIE changing social relations’) called **‘framings against fossil fuel energy pathways’**. This field can feature multiple actors, such as NGOs, network organizations, protest groupings and local initiatives (all of these can be more or less formal) that work locally, regionally, nationally but also internationally. Their explicit or implicit aim is to **change dominant (societal) discourses about existing energy pathways, influence policymaking and/ or ‘stop’ local fossil fuel production**. These actors develop framings against energy pathways centred on fossil fuels – this may include discourses, narratives or storylines and can be connected to peaceful opposition & protest, lobbying and/or campaigns.

This field is studied in the United Kingdom, Poland and the **Netherlands** (NL). To allow for meaningful exploration within each country, the framing definition deployed is relatively open drawing on two main sources. On the one hand, we draw on (Bolsen and Shapiro 2017) definition of framings as communicative process, that *“involves making certain considerations salient as a way to simplify or shape the way in which an audience understands a particular problem and its potential solutions”*. On the other hand, we draw on (Wittmayer et al. 2019) definition of narratives of change as *“sets of ideas, concepts, metaphors, discourses or story-lines about societal transformation”* to guide our work on this SIE-field. The latter draws our focus to the actual content of such frames (rationales, actors, plots) as well as onto the ways these are constructed, negotiated and reproduced over time and finally their performativity in larger (policy) processes.

The Netherlands has by now a long history of **gas extraction**, which (Correlje, van der Linde, and Westerwoudt 2003) divide into three periods. A first period started with the discovery of Dutch gas fields in the 1950s, including the biggest European onshore gas field in the province of Groningen. Gas extraction started in the 1960s by the NAM (a joint venture between Shell and ExxonMobil), and a national gas grid for Dutch households and industry was built by Gasunie (a joint venture between the Dutch State, Shell and ExxonMobil). The latter was also responsible for sales and secured export contracts with neighbouring countries. This period was characterised by *“the perception of energy abundance, low oil prices, economic growth, a relatively closed process of political decision-making, and a rapidly increasing share of natural gas in Dutch energy supply”* (Correlje, van der Linde, and Westerwoudt 2003, 20). Towards the end of this period, coal extraction in the province of Limburg came to a definite halt (1974) after the discovery of the gas

field¹. The second period started with the 1973/74 oil shock which was triggered by a rise in oil prices and increased the importance of natural gas resources. Economic recession and scarcity characterised the period, and along with increasing environmental awareness led to the encouragement to search for new on- and offshore gas fields and to a stimulation to exploit smaller fields – supply had to be secured. The higher priced gas from smaller fields was bought by Gasunie and supplemented by lower-cost gas from the large Groningen field to meet national demand and sold at the same price to customers. In 2020, about half of the gas originates from 175 smaller fields and half from the Groningen field. The third period distinguished by (Correlje, van der Linde, and Westerwoudt 2003) started with the process of liberalisation of European energy markets in the late 1980s by the EU Commission and was considered to take up to the time their book was written. Liberalisation was met with resistance in the Netherlands, but eventually led to a radical separation of gas transport and trading activities (at that time in the hands of Gasunie) and to propose an unbundling of ownership of the trading activities.

The prospects for natural gas in the Netherlands changed dramatically between 2012 and 2018 due to rising concerns over climate change and induced earthquakes in the gas-producing province of Groningen, leading to a shift in policy focus from financial to environmental and safety concerns (Beckman & van den Beukel, 2019). Overall, the share of natural gas in primary energy consumption in the Netherlands has been relatively constant over the last decade, fluctuating around 40 per cent. This is significantly higher than the EU average of 23 per cent. This high share is related to a number of factors: large domestic production; the existence of a distribution grid that covers the entire country; the dominant role that gas plays in the heating of buildings (95 per cent), and the historically relatively low cost of gas for large industrial and agricultural users which promoted the use of gas in these sectors (Beckman & van den Beukel, 2019). To complete the picture of energy production in the Netherlands: in 2019, the Netherlands produced 1768 PJ energy (of which 79% from natural gas and 13% from renewable sources) – while it consumed 3156 PJ, of which the majority comes from burning fossil fuels, mainly natural gas (41% in 2019) and oil (39% in 2019) – while only 6% comes from renewable energy technologies (EBN website 2021²).

The **boundaries of the SIE-field** are defined by framings that are being produced and are grounded in anti-fossil fuel energy pathways, that means all types of framings against different

¹ See <https://www.canonvannederland.nl/nl/kolenengas> (accessed March 2021)

² See <https://www.nam.nl/gas-en-oliewinning/aardolie/winnen-van-aardolie.html> (accessed March 2021)

fossil energy sources. These are non-renewable resources that are either imported and/ or extracted through drilling and mining and then burnt to produce electricity or refine them for use as fuel for heating. Against the Dutch background sketched above, this report focuses on anti-gas extraction consisting of **anti-fracking** and **anti- gas-extraction in the Groningen area**, and **anti-investments** into fossil fuels (i.e. the divestment of funds from fossil fuel companies). It does not touch upon **anti-coal**, since in 2019 the government also announced to close all coal-based power plants by 2029³ after it had halted coal extraction already in 1974. The report also does not touch upon **anti-oil framings**. There are only a few onshore oil fields within the geographic boundaries of the Netherlands, where oil is currently extracted⁴. The emergence and development of those three framings against fossil fuel energy pathways and the diverse actor constellations and activities are studied over a **period of just more than ten years**, starting in 2009 until 2020. We have taken this year as a starting point since it marks the start of a period that sees a surge in framings against fossil-fuel in the Netherlands: protest and framings against the fracking of shale gas in several locations in the Netherlands (2010), followed by protest against gas extraction in the province of Groningen (especially after a severe earthquake in 2012) and framings around fossil-fuel divestment (in 2013). Also, it has proven to not be straightforward to draw clear boundaries between activities through which actors engage actively in framing and frame changes from other types of activities (such as direct action, civic disobedience, awareness raising). In exploring the emergence and development of *'framings against fossil fuel energy pathways'* in the Netherlands, this report will include ***different activities within these three main framings while concentrating on the relationship between those activities and actual frames and shifts within these***. One of the main aims of this report is to examine the possible interlinkages between these activities and wider policy, regulatory, social and cultural influences to be able to write up a case

³ See <https://www.rijksoverheid.nl/onderwerpen/duurzame-energie/toekomst-fossiele-brandstoffen> (accessed March 2021)

⁴ See <https://www.nam.nl/gas-en-oliewinning/aardolie/winnen-van-aardolie.html> (accessed March 2021)

study report that can be used for a comparative analysis of similar activities and framings in the United Kingdom and Poland.

The following paragraphs will include summarised introductions of each of the framings in this case study: anti-fracking, anti-Groningen gas, and divestment.

Anti-Fracking: Around the time the first concerns about depletion of the gas fields in Groningen arose, the Dutch government brought to the fore **shale gas as an alternative** (Metze 2013b; Rasch and Köhne 2016). Following the United States, where shale gas was considered a ‘game changer’ in the energy market, the Netherlands considered shale gas as potential transition fuel to sustainable energy (ibid.). In 2009, Cuadrilla Resources, a British shale gas exploration company, was granted permits by the Dutch government for test-drillings in several areas, namely Boxtel, Haaren, and a year later also the Noordoostpolder. When local communities gained information about the possibility of fracking in their neighbourhoods, they organized themselves in citizen organizations. Later on, **Schaliegasvrij Nederland** was founded – a featured initiative in this report. In collaboration with several environmental NGO’s, the citizen organizations raised concerns about the environmental impact and safety. Subsequently, a nation-wide wave of self-proclaimed fracking free municipalities united to protest fracking activities (see Figure 1). The public turmoil led the minister of Economic Affairs to install a moratorium on fracking in 2011, until further research was carried out.

Anti-Groningen gas: It was in 2012, just after a moratorium was put on shale gas fracking, when the **Groningen gas extraction** resulted in an earthquake near the village of Huizinge with a 3.6 magnitude. This was not a single incident, rather earthquakes had increased in number and magnitude over time. It was the earthquake in 2012 that (Beckman and van den Beukel 2019, 3) consider as a turning point. It was followed by increasing public resistance across the Netherlands and for Dutch policymakers “*environmental and safety considerations started to outweigh financial and economic considerations*”. The

Nederland wil geen schaliegas

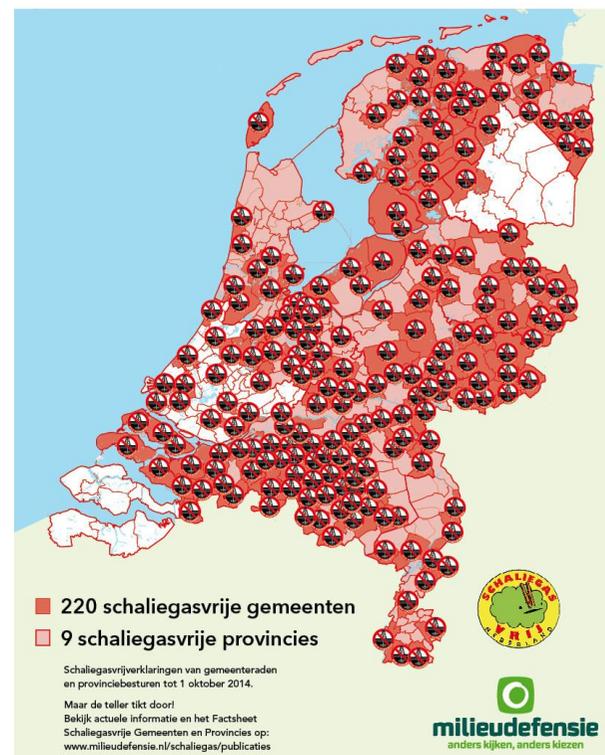


Figure 1: Shale gas free municipalities and provinces (Source: <https://milieudefensie.nl/actueel/kaart-schaliegasvrije-gemeenten.jpg> (accessed March 2021))

Groninger Bodem Beweging (GBB), one of the initiatives featured in this report, arose from the resistance of the local population and their demands for fair compensation.

Anti-investment/divestment: Around the same time, the grassroots climate campaign 350.org, co-founded by Bill McKibben launched its **divestment** campaign ‘Go Fossil Free: Divest from Fossil Fuel!’. It was after students of six universities in the United States demanded their university administration to divest their endowments funds from fossil fuels and invest into clean energy. The goals of divestment campaigns are to revoke the social licence of the fossil fuel industry, and to then channel funds to more sustainable investment opportunities. In 2013, the first divestment campaign in the Netherlands took place at the Free University, Amsterdam and to date counts 17 local action groups and a national hub, **Fossielvrij NL**, the independent Dutch branch of 350.org and one of the featured initiatives in this report.

SIE changing social relations

In SONNET, we are interested in studying diverse social innovation in energy (SIE). We define SIE as ‘a combination of ideas, objects and/ or actions that change social relations and involve new ways of doing, thinking and/ or organising energy’. As part of this work, we have identified ‘*campaigns against specific energy pathways*’ as a type of SIE where ‘conflicts’ (rather than cooperation, exchange and competition) is a defining feature of social interactions. In this case study, we further specified this into ‘framings against specific energy pathways’ to refer to those configurations of novel ideas against fossil fuel energy pathways combined with actions such as protesting, campaigning or lobbying using both established means (banners, bodies, sites) as well as more novel digital infrastructures (websites, social media, etc), which aim to change dominant (societal) discourses about existing energy pathways, influence policymaking and/ or ‘stop’ local fossil fuel production.

For example, for divestment, the SIE can be defined as: configurations of new ideas (moral and financial arguments regarding divesting from fossil fuel industry) packaged in actions (such as campaigns, petitions, demonstrations, art, ...) using ‘objects’ (internet, banners, bodies, etc.) that change social relations between different actors. This may include between investors and investees (i.e. revoke investment), between fossil fuel companies and society (i.e. revoke social licence), between public organisations as investors and their stakeholders (i.e. society becomes more demanding on what happens with their money). This can then

involve not only those new framings, but also new ways of organizing (e.g. investment policies) and doing (e.g. investing in renewable energy rather than in the fossil fuel industry).

Changes over time are marked in the changing of concrete frames used. These evolved along with either shocks (such as the earthquake in Huizinge) or with the societal development (such as the increasing acceptance that gas extraction not only needs to be reduced but actually be stopped). Also, an interviewee indicated that activities related to the spread of these framings have changed and became more 'radical'.

The historical account in section 5 can be considered a meta-analysis that has to be read considering a number of methodological limitations (See Annex 1: Methodology). It is structured around three phases to encapsulate all types of frames and activities of these three 'framings against fossil fuel energy pathways'. These three phases provide an overview of developments of the three 'framings against fossil fuel energy pathways' in the Netherlands over time and are structured around two key changes in the emergence and development of these framings.

- **Phase 1: 2009-2013 Emergence of new anti-fossil fuel framings and initiatives:** a period where framings against fossil-fuel surged in the Netherlands: newly emerging protest and framings against the fracking of shale gas in several locations in the Netherlands (2010), increased protest against gas extraction in the province of Groningen (after a severe earthquake in 2012) and newly emerging framings around fossil-fuel divestment (in 2013). During this first phase, different actor constellations emerged locally at sites where shale gas resources were to be explored along with a frame focusing on safety and environmental damage. An alternative frame on safety emerged, next to the focus on damage of houses in actor constellations around anti-gas extraction from the Groningen field. Both these frames started in the localities where gas extraction was going to be or already took place. Finally, a frame combining climate change and financial investment was brought to the Netherlands and picked up by individuals and a leading NGO.
- **Phase 2: 2012-2017: National frames on energy transition and growth of movements:** a period that started when the actor constellations consolidated and grew and when activities and frames of all three framings went beyond specific localities to reach a broader nation-wide public. This took place around 2012 for anti-fracking, when the campaign by Milieudefensie (a national NGO) took off, ShaleGasFree Netherlands was founded and also activists in a different location (Noordoostpolder) started to organise. In

2014 for anti-Groningen gas, when a new governmental decision on gas extraction was taken, Milieudefensie got involved and the problems with gas extraction were more present across the Netherlands. The same year also for divestment, with the start of a national campaign targeting the ABP pension fund which acted nationwide. The nationalising of the activities and frames meant linking local frames such as environmental or physical damage or safety of the population with national frames such as the security of supply, the economic efficiency of gas extraction as well as the role of gas in the overall energy mix and in the transition to renewable energy. It thus pulled the claims out of the 'private' into a public sphere. The anti-Groningen gas frames started to move towards stopping rather than only reducing gas extraction and to include alternative regional development perspectives putting forth renewable energy as a topic. For the divestment movement it was about making the investment decisions of ABP matters of public interest by linking it with climate change – this was also part of a broader reorientation to focus next to financial also on non-financial ties between society and the fossil fuel industry.

- **Phase 3: 2015-2020 Regulatory successes and reoriented frames:** a period when many of the initial and adapted claims of the SIE-initiatives became institutionalised and they reoriented their frames. For anti-fracking, regulatory success started in 2015, with the strategic environment assessment and an amendment that was filed by MPs to allow refusal of permits on environmental grounds. This quickly led to a change in the Mining Law that banned shale gas extraction in the Netherlands and to a dispersion of the field. For anti-Groningen gas, 2018 marked regulatory success when the Minister of Economic Affairs announced to reduce gas extraction in 2022 and to stop it by 2030 (later this was moved to 2022). This meant that GBB, one of the main SIE-initiatives started re-orienting towards diligent implementation of these new regulations while Milieudefensie started to campaign for stopping gas extraction also in other onshore smaller gas fields in the Netherlands. For divestment, successes had been booked with the campaign against pension fund ABP. They reoriented this campaign, on the one hand focusing on other pension funds and other kinds of investors, and on the other hand to implement their focus on financial and non-financial relations between the fossil fuel industry and society, by e.g. focusing on culture or research institutes.

'Outside' institutional environment shaping the development of the SIE-field

The SIE-field (and its actors) – framings against fossil fuel energy pathways - are nested within an ‘outside’ institutional environment linked to an energy system that is constituted by formal and informal institutions that shape the activities of actors within the SIE-field. Energy systems consist of a wide range of institutionalised rules, norms, and beliefs, which themselves have been subject to profound changes over the past decade. These changes are due to manifold developments and can be grounded in events and contestations, inter-field interactions, external shocks and societal trends. In the SONNET team, we are interested in the ‘outside’ institutional environment that ‘surrounds’ and ‘penetrates’ the SIE-field. We want to understand how dominant institutions (regulative, normative and cultural-cognitive elements) within the ‘outside’ institutional environment influence the emergence and development of framings against fossil fuel energy pathways (See D3.1).

Without doubt, government and gas extraction industry have had a significant influence on the development of this field: its actors, their activities and frames. Extracting gas to secure Dutch energy supply was business as usual and as such has actors with vested interests in maintaining the status quo. Laws and policies, societal expectations and common beliefs were tied to keeping this system in place. The increasingly stronger acknowledgement of climate change and its consequences in public discourse and policy agreements, such as for example the Paris Climate Conference and its national equivalent have been supporting framings against fossil-fuel energy pathways. However, powerful companies such as Shell, co-owner of NAM, have been going far to delay responses or more to not being held accountable for the societal and environmental consequences of their commercial activities. As put by Interviewee 5: *“It became a kind of bureaucratic drama where institute after institute was established to ease damage handling. But what it boiled down to was that at the end of the ride, at the end of each discussion, at the end of each process there were always the lawyers from Shell at the table. And they swept it all from the table.”*⁵. But reactions by actors with vested interests such as this one, also fuelled the inventiveness of the SIE-initiatives. Interviewee 7 considered that *“the criticism they have of, for example, politics, are a major stimulus for their activism and also make it clear how they press on certain matters”*⁶

⁵ Dutch original: *“Het werd een soort bureaucratisch drama waarbij instituut op instituut werd opgericht om die schadeafwikkeling makkelijker te maken. Maar waar het eigenlijk altijd op neerkwam is dat aan het eind van de rit, aan het eind van iedere discussie, aan het eind van ieder proces kwamen altijd de juristen van Shell aan tafel. En die veegden dan alles weer van tafel.”*

⁶ Dutch original: *“de kritiek die ze hebben op bijvoorbeeld de politiek, flinke aanjagers zijn voor hun activisme en ook duidelijk maken hoe ze drukken op bepaalde zaken”*

The box on ‘Regulative, normative and/ or cultural cognitive institutions’ gives more details on how these institutions have shaped the development of the field.

4 Timeline of 'Framings against fossil fuel energy pathways' in the Netherlands

This section provides a visualisation of the overall timeline for all three framing movements: against fracking, against Groningen gas and divestment. It includes major activities and events by SIE-initiatives as well as policy events and relevant environmental shocks. This visualisation is based on the more elaborate information provided in the table in Annex 2.

Figure 2: Emergence and development of anti-Groningen gas framing

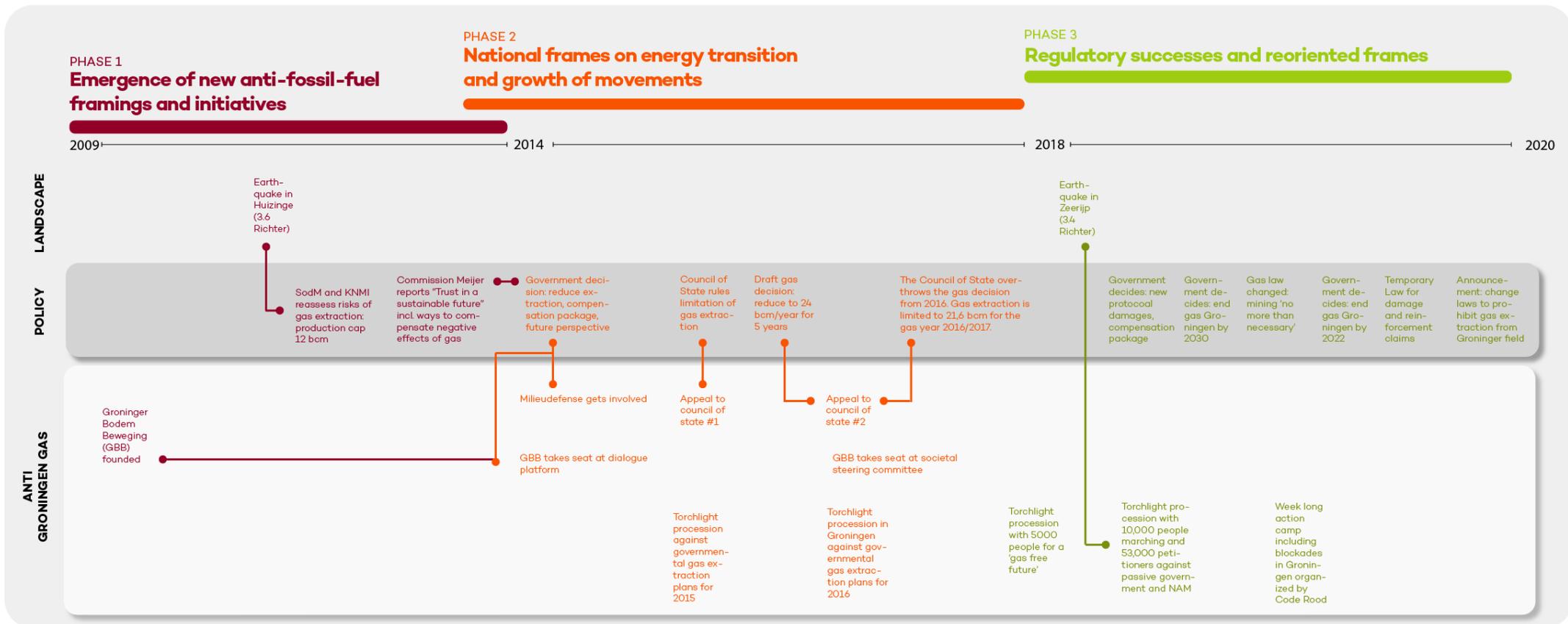


Figure 3: Emergence and development of anti-fracking framing

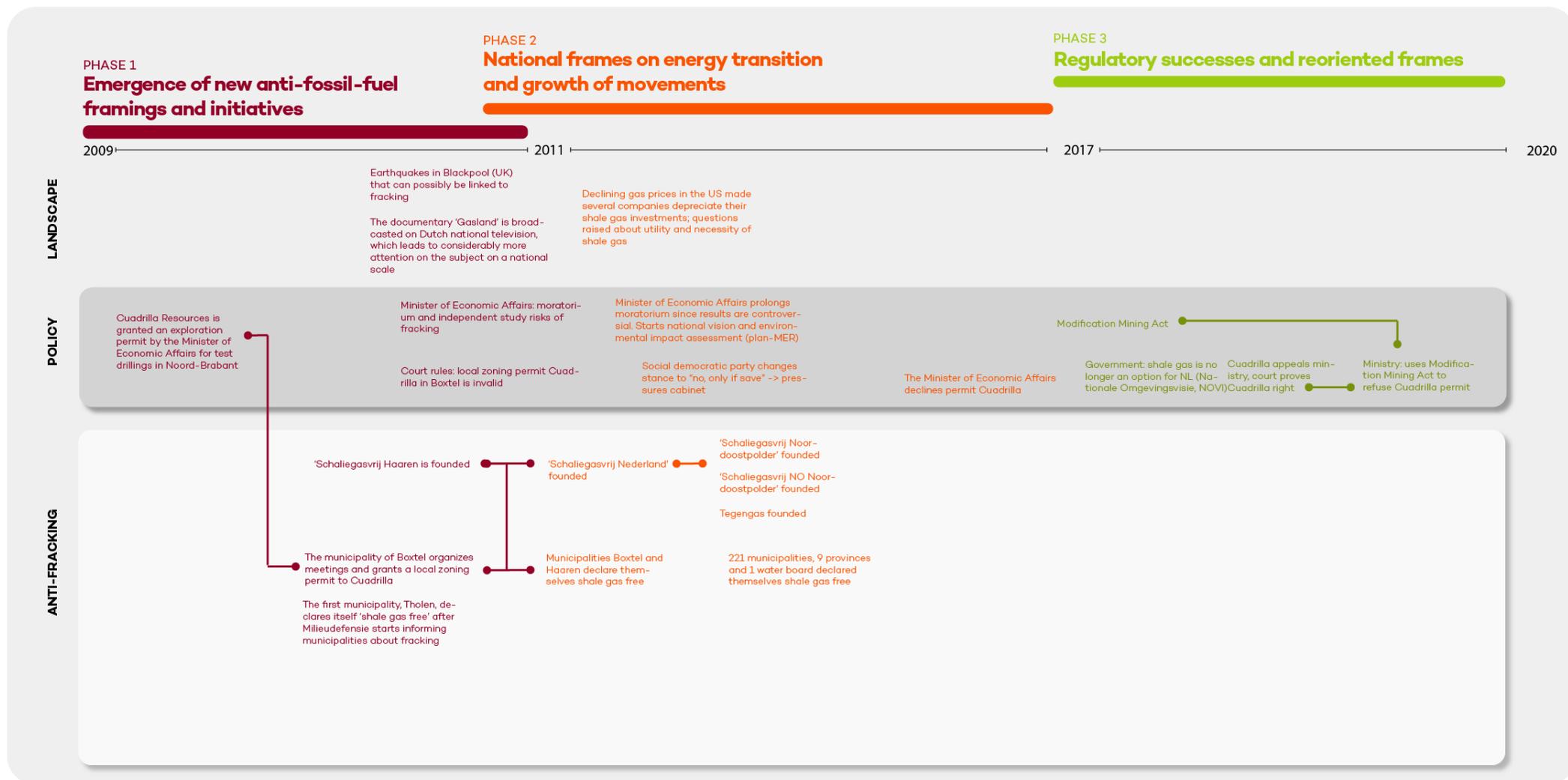
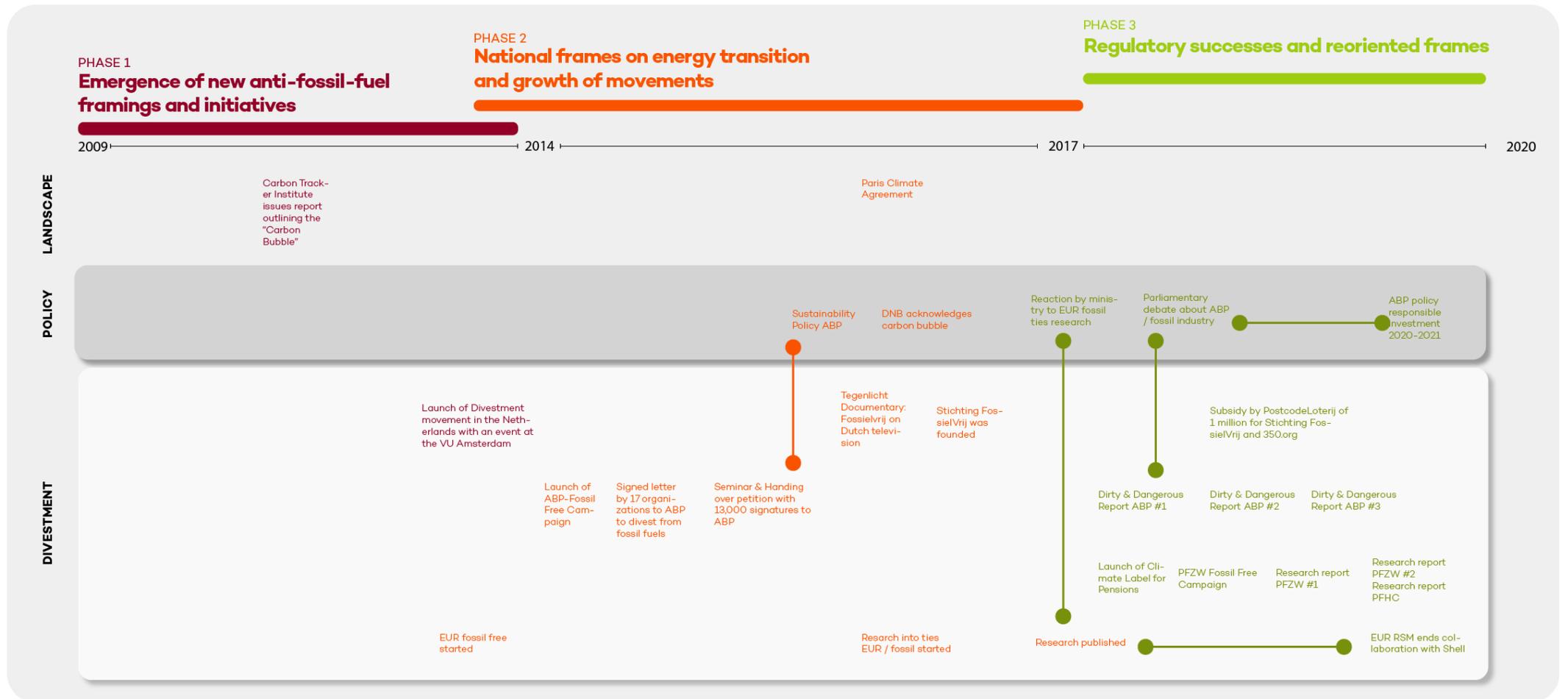


Figure 4: Emergence and development of divestment framing



5 Emergence and development of ‘Framings against fossil fuel energy pathways’ in the Netherlands over time

This section provides a descriptive historical account of how the three ‘framings against fossil fuel energy pathways’ emerged and developed over time until the present, in the Netherlands. It distinguishes between three phases and three main framings (as outlined under Section 2) – for each phase, we outline which alternative and dominant frames were relevant, and which actors and activities were connected to it. For each of the framings, we start with a short summarising paragraph to allow for better readability.

5.1 Phase 1: 2009 – 2013 Emergence of new anti-fossil-fuel framings and initiatives

During this phase, new anti-fossil fuel framings emerged in the Netherlands, against fracking of shale gas, against extraction of natural gas in Groningen and against investments into fossil fuel companies. The start was made by anti-fracking in 2010, followed by an intensification of anti-Groningen gas around a major earthquake in 2012 and finally the divestment movement had its first major event in the Netherlands in 2013. Actor constellations emerge locally at sites where shale gas resources are to be explored along with a frame focusing on safety and on environmental damage. We also see an alternative frame on safety emerge, next to the focus on damage of houses in actor constellations around anti-gas extraction in the Groningen field. Both these frames start in the localities where gas extraction was going to be or already took place. Lastly, another frame arose in this phase, which was largely unrelated to locality. This was a frame combining climate change and financial investment was brought to the Netherlands and picked up by individuals and a leading NGO.

Anti-fracking (2009-2011)

During this first phase, citizen groups such as Shalegasfree Haaren & Boxtel but also by the local press, water company Brabant Water, and local politicians put forth alternative frames focused on environmental damage and safety risks. In the meantime, dominant societal frames considered shale gas extraction as ‘business as usual’ with minimal risks.

For the Netherlands, shale gas was considered a promising alternative to its natural gas field in the province of Groningen. Firstly, because the Groningen natural gas field was expected to run dry in 15-20 years. Secondly, because more and more concerns were raised at a local level linking earthquakes to natural gas extraction (Interviewee 1).

In October 2009, Cuadrilla Resources, a British exploration and production company, was granted an exploration permit by the Minister of Economic Affairs, Maxime Verhagen, for test-drillings in Noord-Brabant (Boxtel and Haaren) (Metze 2018b). The Dutch government and the oil and gas sector considered shale gas extraction as ‘business as usual’ and shale gas extraction as just another form of gas production, and thus with minimal risks to the environment, and as an acceptable, profitable solution to the depleting natural gas reservoir (Cuppen et al. 2019; Metze 2017, 2018b) (Interviewee 2). A year later, an exploration permit was also issued for Flevoland (Noordoostpolder). After receiving the permit for Noord-Brabant, Cuadrilla explored suitable locations and requested location specific permits at the municipalities Boxtel and Haaren in 2010 (Cuppen et al. 2019). At these early stages, there were no signs of opposition or concerns regarding fracking (Interviewee 3) (Metze 2013b).

In Boxtel, opposition emerged in 2011. Late in 2010, the municipality of Boxtel organized two information meetings with next to no attendance and a city council meeting to negotiate the local zoning request from Cuadrilla (Interviewee 1) (Metze 2018a). After setting several conditions, the **permit was granted to Cuadrilla**, making Boxtel the first and only municipality to issue a local zoning permit for exploring shale gas extraction. Village based resistance started to grow in 2011, when citizens in Haaren and Boxtel searched for information online and learned about the alarming developments of fracking in the USA and UK (Cuppen et al. 2019; Metze 2018a). But also through attention to the issue by national newspapers (Interviewee 1). As outlined by Interviewee 2: *“And they actually worked very systematically based on data from the USA and UK to see, what actually is this [fracking]? And which risks are there? And at a certain point in time they had gathered the data [...] which started to make clear that it was not at all without risks or ‘business as usual’ as also the Government had told the municipalities. But also the activists, who in first instance maybe had thought, actually we do not want such a fracking installation in our backyard, but in second instance and above all felt anxious about all sorts of risks and also from the start said, should we actually want this? Thus, actually really fast, they were no NIMBY’s anymore.”*⁷ A game

⁷ Dutch original: *“En die zijn eigenlijk heel systematisch te werk gegaan op basis van gegevens uit de VS en de UK om te kijken van ja, wat is het [fracking] nou eigenlijk? En welke risico's zijn er? En op een gegeven moment hadden ze die info, [...] waardoor duidelijk begon te worden, het is helemaal niet zo risicoloos en ‘business as usual’ als de*

changer was the circulation of the US-documentary ‘Gasland’ including the footage of a man who lights his faucet water on fire (Metze 2017) (Interviewee 1; Interviewee 2; Interviewee 3). Moreover, earthquakes that happened May 2011 in Blackpool (UK) that might be linked to fracking were also cause for concern (Dignum et al. 2016; Metze 2013b, 2018a). Around June 2011, the municipality of Boxtel as well as the parties involved in the permit organised an information meeting each, with high attendance including media representatives (Interviewee 1).

In Haaren, citizens learned in 2010 that test drillings could be realized nearby and became concerned (Interviewee 3) (Rasch and Köhne 2016). As a citizen of Haaren, Interviewee 3’s first concerns were that his natural surroundings would turn into industrial sights – a typical ‘not in my backyard’ (NIMBY) reaction as testified by himself. Alarmed by this, he started asking questions to different parties, such as the city council, the responsible alderman, the local press and searching for other people and organisations with a stake in the issue. Also the municipality of Haaren organised an information meeting with Cuadrilla in January 2011 (Helvoirt Website 2010⁸). At this meeting, Interviewee 3 gave a presentation about the consequences of fracking. Before this meeting, he had raised concerns about fracking by asking questions to the alderman and mayor of Haaren. He also had started to alarm and mobilise (potential) stakeholders and others, such as the local press, water company Brabant Water, local politicians and a member of the Second Chamber Liesbeth van Tongeren from the green left party (GroenLinks). In the preparations for this meeting, he was asked to not show an excerpt of the documentary ‘Gasland’, which had been his intention. During the meeting, the setting and choice of speakers (including Energy Management the Netherlands (Energie Beheer Nederland – EBN), Netherlands Organisation for Applied Scientific Research (Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek – TNO) and national politicians) let him to believe that decision-making had already happened behind closed doors. He outlines: “*So that start that was yes, I was quite, yes, agitated by the fact that I was actually a little bit censored In my opinion because Gasland was not allowed to be shown, also by the fact that the entire decision-making had apparently already taken place behind closed doors*”⁹ After this meeting, he continued to mobilise allies using the strategy of asking questions about fracking. He also learned about resistance

Rijksoverheid ook tegen de gemeenten had gezegd. Maar ook tegen actievoerders, die in eerste instantie misschien wel dachten van ja, we willen niet zo een fracking installatie in de achtertuin, maar in tweede instantie vooral echt ongerust werden door allerlei risico's en ook al van het begin af aan eigenlijk zeiden ja moeten we dit überhaupt wel willen? Dus eigenlijk heel snel ook echt geen NIMBY's meer waren.”

⁸ See <https://www.helvoirt.net/publicaties-gemeente-haaren-week-51-22-december-2010/> (accessed February 2021)

⁹ Dutch original: “*Dus dat begin dat was ja, ik was nogal ja, zelf geagiteerd door het feit dat ik eigenlijk een beetje werd gecensureerd Naar mijn gevoel doordat gasland niet mocht vertoond worden, ook door het feit dat dat de hele besluitvorming kennelijk al had plaatsgevonden binnenskamers*”

against the fossil fuel industry through being connected to the director of the Wadden Association (Waddenvereniging), who was fighting natural gas exploitation in the North Sea at that time.

An actor configuration including actors with different interests started to emerge against shale-gas fracking. Interviewee 3 started ‘Shalegasfree Haaren’ (Schaliegasvrij Haaren) as a foundation, while in Boxtel Schaliegasvrij Boxtel formed as an action group (Schaliegasvrij Boxtel website 2021¹⁰). Their main concerns were decreasing house prices and natural surroundings turning into a gas plant (Metze 2013b), but also risks to their safety and damage to the environment that the drilling could cause. Allies to their cause were the provincial environmental NGO Brabantse Milieufederatie, as well as Milieudefensie (Friends of the Earth Netherlands) (Metze 2013b). But also other parties affected by possible drillings such as the Dutch bank Rabobank with a data centre in the area and the provincial water company (Brabant Water), who raised concerns about potential earthquakes and aquifer contamination by chemicals (Cuppen et al. 2019; Metze 2018b). The action groups received support from national political parties (the socialist party PvdA and the green-left party GroenLinks), a geologist professor Ko van Huissteden who was also active against coal gas fracking in Gelderland, Greenpeace and investigative journalist Ron Lodewijks at Brabants Dagblad, who wrote a series of articles about the topic (Metze 2013b).

Increasing public attention leads to a parliamentary hearing in 2011. In September 2011, the anti-shale gas film ‘Gasland’ was broadcasted on Dutch national television, leading to considerably more attention on the subject on a national scale (Interviewee 2) (Dignum et al. 2016). The same month, Member of Parliament Liesbeth van Tongeren (GroenLinks) initiated a hearing in the Dutch Parliament to discuss the risks of shale gas (GroenLinks website 2018¹¹, Tweede Kamer der Staten-Generaal website 2011¹²; Interviewee 3). Several stakeholders were invited to share their perspective, among them Interviewee 3 from Shalegasfree Haaren, the association of water companies in the Netherlands (Vereniging van Waterbedrijven Nederland – Vewin), EBN, Cuadrilla Resources, the municipalities of Haaren and Boxtel and the province of Noord-Brabant (Tweede Kamer der Staten-Generaal website 2011¹³). During this hearing, the water companies enforced the safety risks and environmental damage frame, as they expressed their concerns about the chemicals used with fracking.

¹⁰ See <https://schaliegasvrijboxtel.blogspot.com/> (accessed March 2021)

¹¹ See <https://groenlinks.nl/nieuws/succes-groenlinks-nederland-schaliegasvrij> (accessed March 2021)

¹² See https://www.tweedekamer.nl/debat_en_vergadering/commissievergaderingen/details?id=2011A02679 (accessed March 2021)

¹³ Ibid.

Legal steps against the extraction permits were successful in 2011. Meanwhile, the Rabobank and a local citizen of Boxtel went to court (Metze 2018a). In October 2011, the court ruled that the permit given out by the municipality of Boxtel was invalid for procedural reasons: while the permit was only temporary, there is no guarantee that the drillings will be a temporary activity (Metze 2013b). In this period of the lawsuit, societal resistance against shale gas grew within the affected communities, and on municipal level. The action groups organised a number of actions, such as protest in The Hague, a protest picknick at the potential drilling site, film screenings of Gasland, and a petition (Schaliegasvrij Boxtel website 2021¹⁴). This was due to a lack of information about fracking and regarding the validity of the information and data provided by Cuadrilla (Interviewee 2) (Metze 2013b). This controversy was fuelled by acknowledged scientists who contested the facts of fracking being shared by vested parties (Cuppen et al. 2019; Metze 2013b).

Anti-Groningen gas (2009 – 2013)

During this first phase, the alternative frame focused on damage (physically and emotionally) including demands for compensation, where value reduction of houses can be considered a specific form of damage (Interviewee 6). This frame was put forth by GBB and other citizens – organised or not. After the earthquake of Huizinga, this opened up to also include concerns of safety and related demands for a reinforcement of houses. The dominant societal frame focused on security of gas supply and the national revenues related to gas extraction. These were put forth mainly by the government and the companies involved in gas extraction (mainly the NAM).

After increasing seismic activity and earthquakes related to the gas extraction from the Groningen field and continued concerns about how policy actors and the gas extraction company NAM (Nederlands Aardolie Maatschappij) were dealing with these, concerned citizens **founded the association Groningen Soil Movement** (Groninger Bodem Beweging - GBB) in 2009. The GBB stood up for the interest of their members related to damages induced by earthquakes (see SIE-initiative box). As put by Interviewee 6: “*We did not start a campaign to stop gas extraction. We started with a campaign [...] to lift or counteract the disadvantages of gas extraction in*

¹⁴ See <https://schaliegasvrijboxtel.blogspot.com/> (accessed March 2021)

Groningen.”¹⁵. The public debate on gas extraction boiled down to a trade-off. On the hand hand, there were national revenues from gas production and the importance of the Groningen gas field for the Dutch security of gas supply. On the other hand, the risks and costs for the inhabitants of the affected region (Mulder and Perey 2018).

Introduction to SIE-initiative: Groninger Bodem Beweging [Groningen Soil Movement]¹⁶

The Groninger Bodem Beweging (GBB) is a community organization founded November 6th, 2009.

Aims: It aims to “defend the interests and needs of people who suffer (financially and/or emotionally) the causes (direct or indirect) of gas extraction in Groningen, the Netherlands”¹⁷. Their goal is to reduce natural gas extraction to zero and to have all damage compensated. They advocate the following:

- “No financial or emotionally burden on residents because of gas extraction”
- “Good and complete claims handling”
- “A beautiful and safe environment and preservation of our cultural and historical heritage”
- “Investing in renewable energy sources and future prospects for the region”

Organisational history: The GBB arose from a Sounding Board that was established in 2006 as a reaction to the increasing earthquakes and specifically, the earthquake of Westeremden on August 8th that year. This earthquake scored 3.5 on the Richter scale and was the heaviest until then. The Sounding Board was an initiative by the Stichting Dorpsbelangen Middelstum (SDM) after discussions with the province and municipality of Loppersum to research the consequences of natural gas extraction. After a while, the citizens involved in the Sounding Board became dissatisfied with the advancement and conclusions of the research and decided to unite themselves through registering an association, the GBB.

Members: The target audience of the GBB changed over time, from people with actual damage to their houses to all people from Groningen. As an association, they currently have 4000

¹⁵ Dutch original: “Wij zijn geen campagne begonnen, euh, om zeg maar gaswinning überhaupt stop te zetten. Wij zijn begonnen met een campagne om de nadelen van de gaswinning in Groningen [...] op te heffen dan wel tegen te gaan.”

¹⁶ The information collected in this description were taken from the GBB website if not stated otherwise.

¹⁷ See <https://www.groninger-bodem-beweging.nl/english/> (accessed March 2021)

members. Moreover, their presence in media and press has caused widespread sympathy in the Netherlands and even beyond, and support for people from Groningen is thus coming from beyond the province.

Organisational structure and governance: The GBB is a volunteer organization with a board that consists of 5 members. Activities of the board vary from, among other things, maintaining press contacts, conducting legal proceedings, inform politicians, participate in working groups, maintaining social media, reading all relevant documents and reports, and to organize meetings. A Sounding Board, consisting of 30 people, support the board and represent the teams of volunteers. The GBB has several teams with different foci, including mortgages, communications and damage & consolidation. Incomes are generated through membership fees as well as financial support from governments for taking part in consultations.

Strategies (Interviewee 6):

- **Constitute a movement:** It was a very conscious decision to take the form of an association rather than a foundation – since the former allows you to build a power base of members. Interviewee 6 explains it as follows: *“Then we founded an association. Not a foundation, because a foundation remains small and it has great independence. But yes, and it can bring legal proceedings, but it has no basis of power in society and the population. So, we deliberately chose the form of association”*¹⁸
- **Finding a good balance between taking action and sitting at the negotiation table.** As put by Interviewee 6: *“ We have always tried, and we have succeeded quite well, I must say, you have to be salonfähig, you have to be able to sit at the conference table and you have to be able to go out into the street. A combination of the two is very important, it strengthens each other and strengthens your own position of power.”*¹⁹
- **Get paid for what you do.** Also, this strategy is explained by Interviewee 6: *“ And another strategy has been... Yeah, anyway money. Uhm. When we joined the societal steering committee, we demanded that we be funded. So you have to ... in fact, you are selling your participation. You sell it in exchange for money, don't you? They benefit from it. You know how it goes, don't you? When they consult with you, they almost always say in the media ‘we have had good consultations with so and so’. Yes, you have*

¹⁸ Dutch original: *“Toen hebben we een vereniging opgericht. Geen stichting, want een stichting blijft klein en die heeft wel een grote onafhankelijkheid. Maar ja, en die kan wel rechtszaken voeren, maar die heeft geen machtsbasis in de maatschappij en de bevolking. Dus wij hebben met opzet een verenigingsvorm gekozen”*

¹⁹ Dutch original: *“We hebben altijd geprobeerd om, en dat is ons aardig gelukt, moet ik zeggen, je moet salonfähig zijn, je moet je aan de overlegtafel kunnen zitten en je moet de straat op kunnen. Een combinatie van die twee, die is heel erg belangrijk, dat versterkt elkaar en dat versterkt je eigen machtspositie”*

to be very careful what you do there and whether it makes sense. Then we also said right, yes, they have an interest in us, so just let them pay”²⁰

- **Let the world know:** The last strategy was bringing the problem to public attention. *“So, our strategy, which is interesting for you of course, was to get it in the papers every week. That was, say, the main strategy. The problem must always be in the spotlight. So, whether it's a lawsuit or an earthquake or someone's drama, keep bringing that to the media, keep bringing it to the media. And that meant that in the end many political parties, the fractions in the Parliament, also got involved. You become concerned with the problem because politics, which is of course a well-known fact, reacts mainly to the media. Because they assume that if it gets in the media, then it will also have support in society. And they are afraid of that”²¹ (Interviewee 6)*

Activities: The GBB engages in a whole range of different activities, including:

- **Taking action:** such as organising torchlight processions, supporting the Code Rood action camp
- **Consulting and deliberating:** such as taking a seat first at the dialogue platform and then at the societal steering committee, discussing with municipalities, the Province of Groningen or the Ministry of Economic Affairs
- **Engaging into legal action:** such as filing appeals with the Council of State, or suing the NAM
- **Write and spread newspaper:** such as issuing their own newspaper, having a constant stream of news on their website

In August 2012, an **earthquake** reaching 3.6 on the scale of Richter **took place in Huizinge**. It was the most severe one to date and is considered a turning point for the Dutch public opinion about gas extraction (Beckman and van den Beukel 2019). It is also the turning point regarding the frames that actors are using, while the focus until then was on the physical and emotional

²⁰ Dutch original: “En een andere strategie is geweest... Ja, toch wel een beetje geld. Uhm. Toen wij in de maatschappelijke stuurgroep kwamen toen hebben we geëist dat we dus gefinancierd werden. Dus je moet... in feite verkoop je je participatie. Die verkoop je in ruil voor geld hé. Zij hebben er wat aan. Je weet toch hoe het gaat? Als ze met jou overleggen, dan zeggen ze bijna altijd in de media van “we hebben goed overleg gehad met die en die”. Ja dus, je moet ontzettend uitkijken wat je daar doet en of het wel zinvol is allemaal. Toen hebben we ook gelijk gezegd, van ja, zij hebben belang bij ons dus laat ze ook gewoon betalen”

²¹ Dutch original: “Dus onze strategie was, dat is interessant voor jullie natuurlijk, om het elke week in de krant te krijgen. Dat was zeg maar de hoofdstrategie. Het probleem moet steeds in de schijnwerpers komen te staan. Dus of het nou komt door een rechtszaak of door een beving of door een drama van iemand, steeds dat naar de media brengen, steeds naar de media brengen. En dat zorgde er voor dat uiteindelijk veel politieke partijen, de fracties in de Tweede Kamer, ook omgingen. Je raakt begaan met het probleem omdat de politiek, dat is natuurlijk een bekend feit, die reageert vooral op de media. Omdat ze er dus van uitgaan dat als het in de media komt, dan heeft het ook wel draagvlak in de maatschappij. En daar zijn ze beducht voor”

damage and its compensation, now safety and with it the reinforcement of houses became an issue as well (e.g. (Onderzoeksraad voor Veiligheid 2015). As put by the GBB, whose member base increased to 500 after the earthquake: “*The severity of this earthquake reveals that it is not going to be ‘easy’ and that next to damage, also safety is an issue*” (GBB website 2021²²). Interviewee 6 outlines “*at the beginning we did not even think about unsafety. Nobody thought that it could be that bad, but after Huizinge [...] then it started emerging, that it is not safe here. And then the issue of reinforcing houses arose. Then we had to find a way for how we could reinforce*”²³.

Following the earthquake, in January 2013, the State supervision of the Mines (Staatstoezicht op de Mijnen - SodM) and the Royal Netherlands Meteorological Institute (Koninklijk Nederlands Meteorologisch Instituut - KNMI) **reassessed the risks for earthquakes arising from the extraction of natural gas** (Muntendam-Bos and de Waal 2013; Staatstoezicht op de Mijnen 2013). They advised to reduce “*the gas production from the Groningen field as fast as possible and as much as possible and realistic*” (Staatstoezicht op de Mijnen 2013). Only through reducing or even stopping the production would there be a (time-delayed) reduction of earthquakes. The assessment report suggested a production cap of 12 bcm/year: “*Based on the derived (preliminary) relation between annual number of earthquakes and production, production rates would have to be lowered to values around 12 normal BCM/year in order to achieve minimal risk*” (Muntendam-Bos and de Waal 2013, 6). This advice did not have immediate consequences for the actual gas production, which peaked at 53,25 bcm in 2013 (see Figure 5) but was often taken as a reference point at later points in the development.

²² Dutch original: “De heftigheid van deze beving maakt voor het eerst aan veel mensen duidelijk dat het ‘niet meevalt’ en dat naast schade ook veiligheid een issue is”, Source: <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/>

²³ Dutch original: “Dat voldeed niet in het begin en in het begin dachten we nog niet eens over de onveiligheid. Niemand die dacht dat het zo erg kon worden, maar na Huizinge [...]. Toen kwam de zaak naar boven, van is het hier niet onveilig. En toen kwam er dus versterking. Toen moesten we een modus vinden van hoe gaan we nu versterken.”

Jaarlijks gewonnen gas uit het Groningenveld

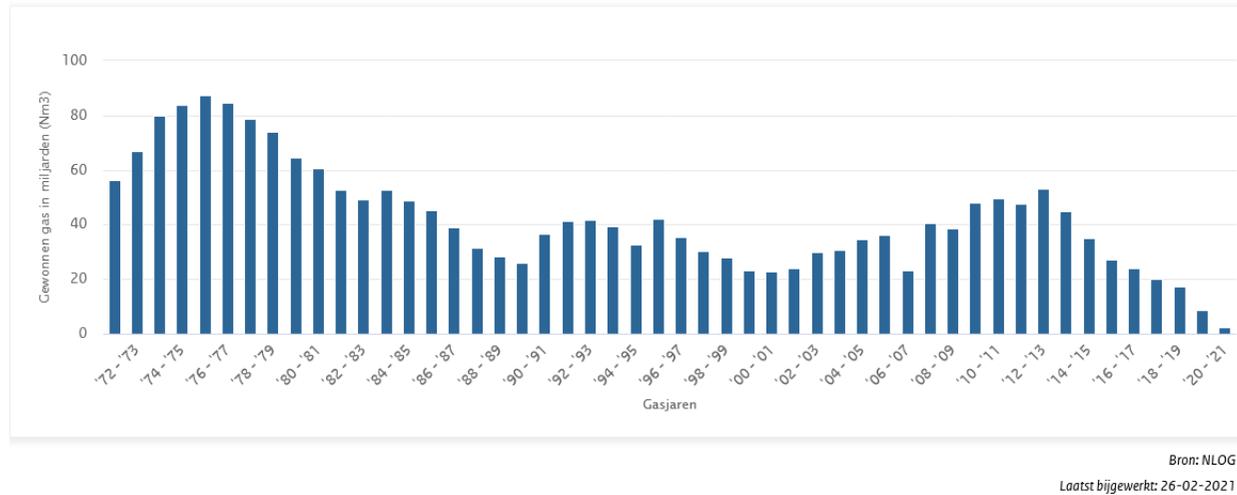


Figure 5: Annual gas extraction from Groningen field (Source: Rijksoverheid website 2021²⁴)

The earthquake was the moment when “*politics also started moving*”²⁵ (Interviewee 6). In May 2013, the Province of Groningen established the **Commission Meijer** (or Commission Sustainable Future North-East Groningen – Duurzame Toekomst Noord-Oost Groningen) to formulate an advice for the future of the gas extraction area. This was meant in addition to the fifteen studies that the Ministry of Economic Affairs had commissioned since the Huizinga earthquake. In October 2013, the Commission Meijer presented its report titled ‘Trust in a sustainable future’ which advised on issues of safety, the quality of the living environment and a transition to sustainable energy. It also touched upon the reinforcement of houses, the value reduction of houses, an independent supervision of damage claims, as well as the establishment of a dialogue platform including all stakeholders (Commissie Meijer 2013).

That same year, 2013, saw the foundation of another SIE-initiative that we highlight as part of this report, the Foundation Value Reduction through Earthquakes Groningen (Stichting

²⁴ See www.dashboardgroningen.nl (accessed March 2021)

²⁵ Dutch original: “En toen kwam ook de politiek in beweging” (Interviewee 6)

Waardevermindering door Aardbevingen Groningen - StWAG). The StWAG demanded that the NAM paid for value reduction of houses “*notwithstanding sale or physical damage*”²⁶ (Stichting WAG 2021). Also, the number of members of GBB tripled to arrive at 1500 at the end of 2013 (GBB website 2021²⁷).

Divestment (2013)

During this phase, international actors such as the Carbon Tracker Institute and 350.org put forward an alternative frame on investments in fossil fuels. They combined climate change and financial investment to argue that investing in the fossil fuel industry is both morally (taking sustainability policies seriously), and financially (investments in fossil industry run the risk of becoming stranded asset), untenable. This was taken up by individuals in the Netherlands, but also by one of the leading environmental NGO's Urgenda. The dominant societal frame was that investment portfolio's need to be spread to allow for a stable return and that investing in fossil-fuel companies is profitable for the time being and will be for the time to come.

A last framing that emerged during this phase focused on divestment. It consisted of a **moral and a financial component** (Blondeel 2019) and leaned heavily on earlier divestment campaigns such as the apartheid divestment campaign that was credited with having helped to end the Apartheid regime in South Africa. The moral frame states that if public organisations take climate change and its uneven societal consequences seriously, they would start divesting from fossil fuels. The financial frame links financial concepts to climate change in that it posits that investments in fossil fuels are financial risks in that they are overvalued and run the risk of becoming stranded assets, i.e. uneconomic or non-profitable before their time. This is also referred to as the carbon bubble (Carbon Tracker Initiative 2011). The argument brought forth by the Carbon Tracker Initiative in 2011 was that we can only burn 20% of the total fossil fuel reserves of coal, oil and gas companies since after that we cross the 1,5 degree Global Warming that is considered safe for humanity – and that therefore 80% of the reserves need to stay underground and cannot be extracted nor sold (ibid). The dominant frame regarding investments was that investment portfolio's need to be spread to allow for a stable return. Investing in fossil-fuel companies was considered profitable for the time being and for the time to come.

²⁶ Dutch original: “ongeacht verkoop en ongeacht al of niet fysieke schade”

²⁷ See <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/> (accessed February 2021)

The reasoning on the carbon bubble was picked up by 350.org and its founder Bill McKibben in a widely shared article in the Rolling Stones Magazine in 2012 (McKibben 2012) – and from there has inspired what is now known as the divestment movement. In March 2013, a **first action** directly related to 350.org marked the launch of activities in the Netherlands. Students of the Free University Amsterdam asked their university to divest its funds from fossil fuel companies (Tielbeke 2015). They were supported by Marjan Minnesma, director of the environmental NGO Urgenda and a prominent figure in the Dutch environmental scene (see Figure 6). Later that year, in October 2013, the Free University Amsterdam was one of the **stopovers of the ‘Fossil Free Europe Tour’** featuring 350.org founder Bill McKibben, Greenpeace International executive director Kumi Naidoo and Maurits Groen of MGMC (FossilvrijNL website 2013²⁸). The event was the official start of the Dutch Fossil Free campaign and was supported by Urgenda, the university’s student union and Greenpeace International. During this event, the Dutch town of Boxtel declared it would divest from fossil fuels and thereby became the first European municipality to do so (Fossilvrij NL and 350.org 2017; Tielbeke 2015). The event was followed by an **opinion piece** in the Dutch financial newspaper, Financieel Dagblad, where Groen, Minnesma and McKibben argue for a divestment of funds from traditional energy companies (Groen, McKibben, and Minnesma 2013).

Also, in 2013, Interviewee 7 started to get active at the Erasmus University Rotterdam with a group called ‘ConsideURing Climate’ to “ask the university to stop, to break their ties with the fossil fuel industry”²⁹. These activities were not connected to the activities or network by 350.org and the Amsterdam divestment activities: “I started that a bit on my own and at that moment I did not know anything about the fossil free campaigns in the Netherlands [...] It is of course connected to research, since I was employed at the university to do research [...] and then I thought ‘ok but how does this relate to the institute within which I work’. And this is how I translated it to the local context, to my specific university, and then I started to ask questions”³⁰ (Interviewee 7).

In these starting days, there were thus individuals who got inspired by the arguments of the divestment movement and started to employ first actions. As put by Interviewee 4 in relation to the ABP Fossilvrij campaign (see next phase for details): “There were mainly individuals, I think,

²⁸ See <https://gofossilfree.org/nl/press-release/fossil-free-netherlands-campaign-launches-with-a-win/> (accessed January 2021)

²⁹ Dutch original: “Om de universiteit te vragen te stoppen, om de banden die ze hebben met de fossiele industrie te verbreken”

³⁰ Dutch original: “Die begon ik daar in m’n eentje en op dat moment was ik me nog niet helemaal bewust van de fossilvrij campagnes in Nederland [...] Het is natuurlijk verbonden met onderzoek, omdat ik werd aangesteld om onderzoek te doen vanuit de universiteit. [...] toen dacht ik ‘okay maar hoe zit het dan eigenlijk met het instituut waar ik nu werkzaam voor ben’. En zo maakte ik die vertaling naar de lokale context naar mijn specifieke universiteit, en toen begon ik vragen te stellen.”

who felt attracted by it and committed to it. It was not so much about organisations that did something with it.”³¹. One of the driving forces from the first day was Liset Meddens, who became the Dutch based coordinator of 350.org (Interviewee 4). Currently, she is Director of the Dutch branch of 350.org called Fossielvrij NL (Interviewee 4). In a Dutch documentary on divestment she outlines the attractiveness of the divestment movement: “It really is a new way because it actually appeals to the financial world, actually, this is the core of our system. Until now, environment and pollution and climate change, everybody thought that this is a leftish green hobby or so, we do not need to do anything with it [...] but when you appeal to the financial side of it, then it touches at the core of the economy and that is where we need to be”³² (Kieft 2015).



³¹ Dutch original: “Het zijn toch vooral losse mensen geweest denk ik, die zich daartoe aangetrokken hebben gevoeld en zich daarvoor hebben ingezet. Het zijn niet zozeer organisaties geweest die daar echt iets mee hebben gedaan.”

³² Dutch original: “Het is echt een nieuwe manier omdat het eigenlijk de kern van de financiële wereld aanspreekt, eigenlijk, dit is de kern van ons systeem. Tot nu toe waren milieu en vervuiling en klimaatverandering ja daar dacht iedereen dat is een linkse, groene hobby of zo, daar hoeven we niets mee [...] maar op het moment dat je de financiële kant ervan gaat aanspreken dan gaat het in de kern van de economie raken en dat is waar we moeten zijn”

Figure 6: First divestment action in the Netherlands (Source: Fossilvrij NL and 350.org, 2017, p. 6)

5.2 Phase 2: 2011 – 2017 National frames on energy transition and growth of movements

During this phase we witness two moves towards broadening initially local issues beyond their locality. Firstly, we see that localised debates around the safety of local inhabitants and local environmental concerns are linked to broader public concerns. In the case of anti-fracking and anti-Groningen gas, those local concerns are linked to national debates about the utility and necessity of (shale) gas as part of the broader Dutch energy mix. Secondly, we see not only local actors, but also national actors, such as Milieudefensie being involved in anti-gas extraction campaigns (both in Groningen and against shale gas). During this second phase, we thus see actor constellations consolidate and grow beyond the (initial) sites of the exploration of shale gas to spread across the Netherlands with a frame focusing on safety and on environment but also including frames of public concern regarding economic feasibility as well as the utility and necessity of shale gas in the energy transition. In the anti-Groningen gas framing, the actor field started to extend beyond the locality, as exemplified through the involvement of Milieudefensie and more and more citizens around the Netherlands. The frames started to move towards stopping rather than only reducing gas extraction and to look out for alternative regional development perspectives including renewable energy as a topic. Finally, the divestment movement opened up beyond their initially more locally-rooted target groups, such as universities and cities, to also consider nation-wide actors such as pension funds and the advertising sector – this included a move from a focus on quantitative ties to also focus on qualitative ties.

Anti-fracking (2011-2014)

During this phase, actors against shale gas extraction increasingly cooperated and organised themselves on national level – this included Shalegasfree Netherlands, a higher involvement of Milieudefensie. Moreover, the framing against shale gas spread across the country through more and

more municipalities declaring themselves as shale gas free. Their frames focused on environmental damage and safety risks, but increasingly started to also include concerns about the economic feasibility as well as the utility and necessity of shale gas in the energy transition. Both of the latter frame struggles linked shale gas extraction to a broader 'public' debate, where other field actors continued to focus on 'business as usual' in the beginning, but where the safety and environmental frame became dominant throughout this phase, also taken up by the Ministry for example. The frame struggle then extended to whether shale gas was economically feasible : a game changer or more a 'drop in the ocean' and a solution that would 'fuel' an energy transition towards renewables or that would 'delay' it (Metze 2018b).

During the course of 2011, **fracking and its possible consequences became a more controverse topic** surrounded by knowledge uncertainties. These related to geological conditions and the impact that drilling could have on geological faults (Metze, 2013; Interviewee 1), but also to the risks for earthquakes and aquifer contamination. Beyond these frames around environmental and safety impacts, also an economic uncertainty frame emerged. Namely, a frame around the uncertainty of the amount of extractable shale gas put questions forward about the utility and necessity of shale gas extraction, and if the economic benefits would outweigh the extraction costs (Metze 2013b).

Knowledge uncertainty increased and led to a temporary moratorium on fracking and a change in the position of Boxtel municipality. A dispute about facts and knowledge leads With mounting societal pressure, the Province of Brabant and the city council of Boxtel insisted on independent research about the environmental effects of shale gas drilling. Initially, the Minister of Economic Affairs, Maxime Verhagen, did not see the necessity for such research but soon after, in October 2011, installed a **temporary moratorium on fracking** because of the uncertainties around environmental impacts and risks (Metze 2013b; Rasch and Köhne 2016). Interviewee 1 argued that the attitude shift of the Dutch government, that went from 'safe' to 'uncertain', was also reason for the municipality of Boxtel to revise their position regarding shale gas and together with the Province of Brabant joined the group of opponents (Metze, 2018b). He reflects: *"As self-evident as the government in the beginning said that shale gas drilling was a part of the small fields policy and that it was intended as a transition to sustainable energy. That was a transition movement and a transition from fuel to sustainable energy. I thought that was a very plausible story. [...] Then yes, then the government came, almost from one moment to the next with the story of 'Yes yes yes, there are also a lot of uncertainties for us, We still have to do research.' [...] [I] felt I was made ridiculous. Then I immediately said: that happens once, but not anymore. And then we*

just turned 180 degrees and said in Boxtel that if I have the feeling that people ... are fooling me, then I will not keep doing that [...] and I just don't want it anymore. [...] because I think I have been fooled, that I did not tell the correct story.” (Interviewee 1³³).

The moratorium meant that environmental uncertainty and risks have gained importance in the debate and were taken up by the ministry and other governmental actors in an attempt of problem solving (Metze, 2013). It was considered as a turning point, as put by Interviewee 1: *“But also, the announcement of the first moratorium gave the feeling for some that they did not have to worry anymore about fracking, that this was the first sign of fracking going off the table”³⁴*

At the same time, the NGO Milieudefensie had taken an active role in connecting actors in their struggle against shale gas (Interviewee 3). It also played a role in establishing a national foundation **Shalegasfree Netherlands** (Schaliegasvrij Nederland), together with individuals involved in Schaliegasvrij Haaren and Schaliegasvrij Boxtel, and the anti-coals gas extraction movement from Gelderland (Interviewee 3). Also the provincial environmental organisations of Noord-Brabant and Gelderland and Greenpeace played a role (Cuppen et al. 2019). These organisations continued throughout this phase to actively report their ideas on shale gas extraction. For example, they linked the gas extraction induced earthquakes in the Groningen field, such as the 2012 earthquake in Huizinge with 3,6 on the Richter scale (DVHN Website 2021³⁵), to shale gas extraction. Since compensation for damages in the Groningen area took very long although financially powerful actors were responsible, concerns rose that Cuadrilla, as relatively small player, would be financially unable to compensate local communities when damage would occur. This linked to an important framing that was taken up, namely whether shale gas extraction was economically feasible in the first place, and thus whether potential economic benefits would outweigh the extraction costs. According to Interviewee 3, the focus on economic feasibility was important because it was the reason why proponents wanted to frack: *“And so if you know that the argument is money, then in order to properly refute that argument you should not say yes, but I do not agree with that. But then you have to say: listen, if you do what you*

³³ Dutch original: *“Zo vanzelfsprekend als het Rijk in het begin zei dat schaliegasboringen een onderdeel waren in het kleine velden beleid en dat dat bedoeld was als transitie naar duurzame energie. Dat was een transitie beweging en transitie brandstof naar duurzame energie. Dat vond ik een heel plausibel verhaal. [...] Toen ja, toen kwam het rijk, bijna van het ene op het andere moment met zo het verhaal van ‘Ja ja ja, daar zijn voor ons ook veel onduidelijkheden, We moeten nog onderzoeken doen.’ [...] Nou toen [...] voelde [ik] me in mijn hemd staan. Toen heb ik meteen gezegd: dat gebeurt één keer, maar nu niet meer. En toen zijn wij gewoon 180 graden gedraaid en hebben in Boxtel gezegd van als ik het gevoel heb dat men mij ... voor de gek aan het houden is, dan blijf ik dat niet doen [...] en wil ik het gewoon niet meer. [...] Ja maar dus vooral omdat ik vind dat ik voor de gek gehouden ben, dat ik gewoon niet het correcte verhaal heb verteld.”*

³⁴ Dutch original: *“Maar het eerste moratorium toen dat uitgesproken werd Dat gaf wel heel veel adem hier, en vooral van nou Dit gaat niet meer gebeuren”*

³⁵ See <https://www.dvhn.nl/groningen/Overzicht-alle-aardbevingen-van-2.0-en-zwaarder-in-de-provincie-Groningen-25853785.html> (accessed February 2021)

do, you think it will make you money, but in fact it is not. So then you are weakening the standpoint of your conversation partner and not your own.”³⁶.

Introduction to SIE-initiative: Schaliegasvrij Nederland [Shale Gas Free the Netherlands]³⁷

Schaliegasvrij Nederland [Shalegasfree Netherlands] is a foundation that consists of community associations and environmental organizations, such as Milieudefensie, Brabantse Milieufederatie, Gelderse Natuur en Milieu Federatie, Natuur en Milieu Overijssel and Greenpeace (Schaliegasvrij Nederland, n.d.-a; Schaliegasvrij Nederland, n.d.-b). Schaliegasvrij Nederland also collaborated with GroenLinks, for example in their campaign to inform municipalities about fracking and convincing them to become ‘shale gas free’. (GroenLinks website 2018³⁸; Interviewee 3)

Aims: The initial aim of Schaliegasvrij Nederland was to have a total moratorium on the exploitation of unconventional natural gas (e.g. shale gas and coal gas) through fracking (Schaliegasvrij Nederland, n.d.-a). After this goal was realised, the aim was to prevent the exploitation of any type of fossil fuels (Interviewee 3). The reasons to resist fracking were: 1) irresponsible health risks to the people and environment through water-, air- and ground contamination, 2) deterioration of the landscape and nature, 3) said benefits of fracking in mitigating climate change are not proven and sustainable alternatives are plenty (Schaliegasvrij Nederland, n.d.-a).

Schaliegasvrij also sees a role for themselves in contributing to the public knowledge on the consequences of gas and oil exploitation on the environment. Additionally, they wanted to promote energy politics in order to reduce the use of fossil fuels as much as possible (Schaliegasvrij Nederland, n.d.-a).

Organisational history: Schaliegasvrij Nederland was founded by individuals involved in the foundation Schaliegasvrij Haaren and the action group Schaliegasvrij Boxtelt as well as the anti-coal gas fracking action group in Gelderland next to Milieudefensie.

³⁶ Dutch original: “En dus als je weet dat het argument centjes is, dan moet je dus, om dat argument goed te weerleggen, niet gaan zeggen van: ja maar daar ben ik het niet mee eens. Maar dan moet je zeggen, luister eens, als je doet wat je doet, dan denk je dat het je centjes oplevert. Maar in feite is dat niet. Dus dan ga je de stoelpoten van de zetel van de gesprekspartner[...] doorzagen, en niet je eigen.”

³⁷ The information collected in this description were taken from the Schaliegasvrij Nederland website if not stated otherwise.

³⁸ See <https://groenlinks.nl/nieuws/succes-groenlinks-nederland-schaliegasvrij> (accessed February 2021)

Strategies: One of the strategies of schaliegasvrij NL according to interviewee 3, is to engage in ‘socratic’ dialogues with stakeholders in order to show why fracking is not desirable: *“The good thing about asking questions, is that you get answers that then again raise new questions. Not as a dialectic game, but as an intellectual exercise that by asking questions, people are forced to give answers. But often those people are shocked by the inadequacy of their answers. And thus, the socratic method has really worked in this case I think”* and *“You have to have a substantiated standpoint, so you do not have to be against something ... And of course, the other party has their own modus operandi and their own reasons to do what they do ... And when you know that their argument is money, you don’t say ‘I do not agree’, but you say ‘you think that you are yielding money, but you’re not’: you saw the legs underneath the chair of your conversationalist, not your own”*

Activities include **lobbying**, such as conversations with local politicians, GroenLinks, in the Parliament, Cuadrilla, media, the municipality; **spreading the word** through an updated website and sending letters; **organising protests in The Hague**. About the latter, Interviewee 3 said: *“So we also had to focus our campaign on, say, the political decision moments, so when there was another hearing we went to set up another argument on the square [in The Hague].”*³⁹

In 2012, the Ministry consulted with stakeholders (local and provincial governments, industrial actors, environmental organizations and action groups) to scope relevant research questions (Cuppen et al. 2019; Metze 2018a). The main disagreement in these scoping discussions concerned the ‘usefulness and necessity’ of shale gas – eventually, these questions were not taken up since the Minister argued that these fall into the domain of politics and not of research (Cuppen et al. 2019; Metze 2013b, 2018a). In June 2012, a **Sounding Board was established to advise on the to be commissioned research**. This was done by the Ministry of Economic Affairs, with several participants of the consultation meetings, including Shalegasfree Netherlands (Metze 2018a) (Interviewee 3). However, conflicts arose within the Sounding Board. The Sounding Board group was consulted for the selection of the research contractor and for commenting on methods and results. The question to be investigated was: can shale gas exploration be carried out safely for nature, environment and people? Quickly, disagreements surged between participants regarding the selected contractor arguing that it was not independent since it had worked for the oil and gas industry previously (Bremmer 2015; Metze 2018a) (Interviewee 2; Interviewee 3).

³⁹ Dutch original: *“Dus wij moesten we onze campagne ook ook richten op zeg maar de politieke besluit momenten, dus op moment dat er weer een keer een hoorzitting was dan ging we weer een betoog optuigen op op het plein”*

Moreover, participants felt that the Ministry had predefined the problem as well as filled seats in the Sounding Board strategically, e.g. including a known climate change denier (Interviewee 3). Some members therefore decided to leave the Sounding Board out of protest.

In July 2013, the **Netherlands Commission for Environmental Assessment** (Commissie Milieueffectrapportages - NCEA), an independent advisory committee on environmental assessment, advised the ministry based on the documents detailing the scope of the commissioned research. It concluded that that this scope was too limited: *“The study was very technical and only partly addressed the concerns felt by the general public. Important information needed for decision-making on shale gas, especially to strike a right balance between conflicting interests, appeared to be lacking.”* (Bremmer 2015, 6). Consequently, the NCEA advised the government to include the above-ground effects of gas exploration and extraction as well as the need for shale gas within the broader energy mix (Bremmer 2015; Metze 2018a). Moreover, also the governing coalition started to disagree in their position regarding the extraction of shale gas, as the social democratic party (PvdA) changed its standpoint to ‘no, unless safe’ in 2013 (Metze 2018a)⁴⁰. This process caused more suspicion on the topic and the way the government was handling it, and it showed the political struggle: *“But that was an important moment in the process. Not necessarily because this changed the framing, but because there the political struggle became very clearly visible. About that research and about the role of the facts that were produced there and the framing of those facts that emerged from that research. Because at a certain point that research was of course also presented, and conclusions were drawn from it, and then it was actually said that we can go, drilling for shale gas [...] And then it was very important that the NCEA [English abbreviation for MER] was very critical about this and said 'What do you mean? Safety is simply too narrowly defined and you have not looked at all kinds of environmental aspects and safety aspects for the residents at all. ' And that was an important moment because then there actually came even more support from society, and pressure came from society to not just continue”* (Interviewee 2)⁴¹.

In September 2013, the **Minister of Economic Affairs published the research on shale gas exploration**, which stated that the risks of fracking were low and could be mitigated (Cuppen et

⁴⁰ A year later, the PvdA declared that they do not support shale gas production because of the environmental impact (Metze, 2018a).

⁴¹ Dutch original: *“Maar dat dat was dus ja, in het proces een belangrijk moment. Niet per se omdat de framing daardoor anders werd, maar wel omdat daar de politieke strijd heel erg duidelijk zichtbaar werd Over dat onderzoek en over de rol van die feiten die daar geproduceerd werden en de framing van die feiten die uit dat onderzoek naar voren kwamen. Want op een gegeven moment werd dat onderzoek natuurlijk ook gepresenteerd, en conclusies aan verbonden, en toen werd er eigenlijk gezegd van we kunnen best gaan, naar schaliegas gaan boren [...] En toen was heel belangrijk dat de commissie MER daar heel kritisch over was en zei 'Hoezo? Veiligheid is gewoon veel te smal gedefinieerd en jullie hebben helemaal niet naar allerlei milieuaspecten en veiligheidsaspecten voor de bewoners gekeken.' En dat is een belangrijk moment geweest omdat er toen eigenlijk nog meer steun vanuit die samenleving kwam, en druk vanuit die samenleving kwam om toch niet zomaar door te gaan”*

al., 2019). However, the NCEA assessed the research and concluded that the research was too narrowly focussed, and that current regulation were not sufficient to cover the risks (Bremmer 2015). They advised to use a governmental spatial planning procedure ('Rijksstructuurvisie') which would broaden the scope, include the role of shale gas in the energy transition, and the participation of local governments and communities. With this **second advice by the NCEA**, the question around the necessity and utility of shale gas extraction in relation to the overall Dutch energy mix has firmly entered the institutional debate. The minister decided to **prolong the moratorium** while the Rijksstructuurvisie was carried out, together with a strategic environmental assessment. The Rijksstructuurvisie was put together by the Ministry of Economic Affairs and the Ministry of Infrastructure and Environment (Metze 2018a) to establish where the most promising and least risky fracking locations in the Netherlands were to be found. Thus, **environmental and health considerations were considered, in addition to the previously researched technical and financial risks**. The Rijksstructuurvisie for shale gas would later become part of an overall structural plan subsoil: STRuctuur visie ONderGrond, abbreviated to STRONG.

These activities within the formal institutional circuit were accompanied by a **growth of the anti-shale gas movement** in the Netherlands. Next to the active role of Milieudefensie and the establishment of Shalegasfree Netherlands at national level, also local actions abounded. After local resistance in Boxtel and Haaren also **Noordoostpolder** got into action. In March 2013, while the contracted research was ongoing, Cuadrilla announced locations for test drillings in the Noordoostpolder, and it was possible that these would start in 2014 (Cuppen et al. 2019; Rasch and Köhne 2016). A day after that announcement, Noordoostpolder Shalegasfree (Noordoostpolder Schaliegasvrij) was founded, supported by Shalegasfree Netherlands and Milieudefensie (Interviewee 3) (Rasch and Köhne 2016). In line with resistance in other places, their main concerns were the idea that their natural surroundings turn into fracking boreholes (Rasch and Köhne 2016). Additionally, members of this group had been involved in activism for sustainable energy before and were concerned about the sustainability of shale gas. One of the members of Noordoostpolder Shalegasfree was also a member of the green left party (GroenLinks) and urged the municipal council to accept a motion against fracking, which they did in September 2013. The municipality of the Noordoostpolder declared themselves a 'shale gas free municipality' because they wanted to focus on sustainable energy and found the risks related to shale gas extraction too high. In April 2014, a second organization against shale gas was founded in the Noordoostpolder, 'Shale gas NO Noordoostpolder' (Rasch and Köhne 2016). Since many citizens and the municipal council considered the resistance towards fracking as too leftish and activist, they wanted to

create more support against fracking addressing another audience. Their main objective was to formulate a ‘Zienswijze Shale gas’ (instrument to participate in decision making) as input for the Rijksstructuurvisie. In addition, they wanted to share objective information with citizens of the risks of fracking. Despite their differences, Shale gas NO Noordoostpolder and Noordoostpolder Shalegasfree worked together because they recognized each other’s added value. Some months later, in September 2014, the Rabobank organized a network meeting in the Noordoostpolder, which led to the foundation of a third action group ‘Tegengas’ (Rasch and Köhne 2016). This initiative was supported by entrepreneurs, farmers and fruiters, a housing corporation, village representatives etc. According to (Rasch and Köhne 2016, 113): *“the residents are represented in Tegengas through the representatives of the village councils. The Noordoostpolder as a municipality is represented by the municipal council ... the village councils are an important level of participation and representation. It was thus an important step when members of the village councils started to write letters and columns to the local newspapers, taking a stand against shale gas and pointing at the dangers of it”*.

More actors started to speak out against shale gas. A group of influential professors criticized policymakers for their lack of strategically considering the impact of shale gas on the transition to a sustainable energy supply (Cuppen et al. 2019). In September 2013, **the ‘shale gas free’ campaign** of Milieudefensie continued to spread over the Netherlands. The provinces of Noord-Brabant, Noord-Holland and Groningen declared themselves shale gas free, as well as the municipality of Boxtel, Haaren and the Noordoostpolder (Cuppen et al. 2019; Metze 2018a). By October 2014, 221 municipalities, 9 provinces and 1 water board had declared themselves shale gas free (Milieudefensie website 2014⁴²). Also, within the Parliament a growing number of politicians started to resist fracking (Interviewee 3). In June 2014, several parties (D66, GroenLinks, CDA, CU, PvdA and SP) submitted a resolution that was accepted in the **Parliament** to take into account decentral governmental bodies in the decision-making process during the revision of the Mining Act, and in the development of the Rijksstructuurvisie Shale Gas (Groen Links website 2018⁴³) (Van Veldhoven et al. 2014).

⁴² See <https://milieudefensie.nl/actueel/schaliegasmoratorium-verlengd-tot-2016-na-duizenden-kritische-reacties> (accessed February 2021)

⁴³ See <https://groenlinks.nl/nieuws/succes-groenlinks-nederland-schaliegasvrij> (accessed February 2021)

Anti-Groningen gas (2014-2017)

During this period, the safety of the population is not only a concern of the SIE-field actors anymore but has entered the broader public debate as a concern of equal importance to the concerns around security of supply. Increasingly also concerns about future perspectives for the gas extraction area are articulated, it seems specifically by the Province of Groningen and the municipalities and linked to renewable energy production. In addition, a reduction of gas extraction has become policy while SIE-initiatives and other field actors start pushing for ending gas extraction.

Based on the new risk assessment by the SodM (State supervision of the Mines) and the KNMI (Royal Netherlands Meteorological Institute, from 2013), the Ministry of Economic Affairs took a **governmental decision on gas extraction** in Groningen in January 2014 (Ministerie van Economische Zaken 2014). This decision concerned a number of important issues: reduction of gas extraction (42,5 bcm in respectively 2014 and 2015, 40 bcm in 2016), reinforcement of houses, independent handling of damage claims, a compensation scheme for value reduction for certain houses and periods, attention to specific situations, a stimulation package for renovating houses, and a stimulation programme for the improvement of the economic perspective and liveability of the area. Based on the advice of the Commission Meijer, and along this governmental decision came an **administrative agreement (bestuursakkoord) titled ‘Trust in repair and repair of trust’** between the government, the Province of Groningen and nine concerned municipalities (Kamp et al. 2014) on four issues: 1) increase safety and reinforcement of houses; 2) improvement of handling of damage claims and value reduction; 3) improvement of liveability and 4) improvement of the economic perspectives). For these measures, 1,2 billion Euro were available for a period of five years. Taken together, these policy documents thus addressed the issue of damage handling (including value reduction of houses) as well as increasing safety (through the reinforcement of houses) – they also followed the Commission Meijer to address the issue of future perspective and for the first time a reduction in gas extraction was brought forth by the government. When Minister of Economic Affairs Kamp visited the Town hall of Loppersum in Groningen to present this governmental decision, he was welcomed by a big group of protesters. According to Interviewee 5 “*And there was a kind of spontaneous protest organised. [...] about 300-400 stood in the mud, badly organised. Farmers who were shooting with carbide, eggs were thrown to the Town Hall, and I went there.*”⁴⁴

⁴⁴ Dutch original: “*En daar was een soort spontaan protest georganiseerd. [...], stonden toen ongeveer 300-400 in de modder, totaal ongeorganiseerd. Boeren die carbid aan het schieten waren, eieren die naar dat gemeentehuis werden gegooid en ik ben daar in...*”

Milieudefensie (Friends of the Earth Netherlands), a national environmental NGO, got involved. Stepping newly into it, the **field** seemed to consist of “*many initiatives*” and to be “*badly organised*”⁴⁵ (Interviewee 5). Next to the GBB, also the group Schokkend Groningen was mentioned, both differed in the methods they were using: “*The GBB tried to be on speaking terms and to accomplish things in deliberation, to see whether anything could be reached via the official ways. The group of John Lanting [Schokkend Groningen] was more the kind of: let us take actions. We are angry. There is also a big cultural difference.*”⁴⁶ (Interviewee 5). More specifically, the GBB sees as one of their main strategies to not choose between deliberation or action but to combine the two: “*We have always tried, and that worked pretty well, I must say, you have to be socially acceptable, you have to be able to sit at the deliberation table and you have to be able to go on the streets. A combination of these two, that is very important, that reinforces each other and that strengthens your power position.*”⁴⁷ (Interviewee 6). This also reflects the member base of the GBB, which consists of both wings – those wanting to see action and those wanting to see deliberation (Interviewee 6). In providing an overview of the field, Interviewee 6 outlines that there are a number of smaller organisations and also “*some websites fulfilling a certain role, but these are not organisations, or associations or the like [...] in fact they are doing the same as us: reporting on all the misery that there is*”⁴⁸. In this context, Milieudefensie campaigners spent much time to gain trust of the local population also because they came with a **different agenda**: “*The people from Groningen have their agenda – what if our house is damaged, who has to pay that. Our agenda was the energy transition. We must not want gas, and gas is also a fossil fuel. [...] We have always been pretty open about this, also to the people from Groningen. Just acknowledging that ‘yes, we have another agenda. But we are fighting the same. So, let’s work together’*”⁴⁹ (Interviewee 5). In this linking of the frames around damage of houses with gas extraction in general, Interviewee 5 sees a linking of local with national interests: “*the moment that we started talking about decreasing gas extraction, it was about the gas supply for all of the Netherlands*”⁵⁰.

⁴⁵ Dutch original: “*heel veel initiatieven*”; “*super ongeorganiseerd*”

⁴⁶ Dutch original: “*Bij de Groninger Bodem Beweging, probeerden ze in gesprek te blijven, in overleg het immers voor elkaar te krijgen, zien of via de officiële paden dingen te bereiken waren. De groep van John Manting was veel meer van: laten we gewoon actievoeren. Wij zijn boos. Het is dan ook heel erg een cultuurverschil*”

⁴⁷ Dutch original: “*We hebben altijd geprobeerd om, en dat is ons aardig gelukt, moet ik zeggen, je moet salonfähig zijn, je moet je aan de overlegtafel kunnen zitten en je moet de straat op kunnen. Een combinatie van die twee, die is heel erg belangrijk, dat versterkt elkaar en dat versterkt je eigen machtspositie*”

⁴⁸ Dutch original: “*en dan zijn er nog wat websites die een bepaalde rol vervullen, maar die eigenlijk geen clubs zijn, geen vereniging zijn of zoiets [...] In feite doen die hetzelfde als wij: melding maken van alle ellende die er is*”

⁴⁹ Dutch original: “*Want de Groningers hebben hun agenda – wat als ons huis gaat kapot wie moet dat betalen. Onze agenda was de energietransitie. Wij moeten geen gas willen en gas is ook een fossiele brandstof. En wat wij hebben gedaan [...] ook naar de Groningers toe zijn we daar altijd best wel open over geweest. Gewoon erkend van ‘ja, wij hebben een andere agenda. Maar wat we bestrijden is hetzelfde. Dus laten we samenwerken’*”.

⁵⁰ Dutch original: “*het moment dat we gingen praten over het verminderen van de gaswinning, ging het over de gasvoorziening voor heel Nederland.*”

Along with this, also the increased media coverage brought the problem to the attention nationwide.

During this phase, a broad array of organisations and institutional platforms responsible for coordinating and implementing damage claims was established and also dismantled. In March 2014, **the dialogue platform Groningen** was established to further work out and detail the plans of the five-year programme of the administrative agreement. This platform was meant to involve all concerned stakeholders such as the Ministry of Economic Affairs, NAM, the Province as well as societal organisations such as the GBB. The GBB had put forth a number of conditions to its collaboration, such as the handling of damage claims by an independent institutions (currently this was being done by the NAM) and a revision of the damage claim protocol (GBB website 2021⁵¹). However, the newly (October 2014) established **Centre for Save Living** (Centrum voor veilig wonen – CVW), responsible for handling damage claims was not yet independent from the NAM but only set at a distance (RTV Noord Website 2021⁵²). In June 2015, the **National Coordinator Groningen** (Nationaal Coordinator Groningen – NCG) was instated as a governmental service to coordinate the handling of damage and reinforcement claims between the different institutional actors concerned and the population (NCG Website 2021⁵³). Since the institutional actors were collaborating under the NCG now, they stepped back from the Dialogue Platform Groningen, which was discontinued. A **societal steering committee is established including the Groningen Gas Deliberations (Gasberaad) and the GBB** in January 2016. The Groningen Gas Deliberations was a collective of societal organisations from different sectors that aimed to *“take care that inhabitants and organisations are maximally involved in setting up and implementing all plans and activities regarding damage, reinforcement and perspective for Groningen”* (Gasberaad Website 2021⁵⁴).

There were a number of important campaigning activities that were started and continued during this period. GBB together with Milieudefensie organised **torchlight processions** in the city of Groningen several times. The first took place in December 2014 to voice discontent about the planned gas extraction for 2015 with the motto ‘back to 30’ [30 bcm/year] (Interviewee 6,

⁵¹ See <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/> (accessed February 2021)

⁵² See <https://www.rtvnoord.nl/aardbevingen/tijdlijn> (accessed February 2021)

⁵³ See <https://www.nationaalcoordinatorgroningen.nl/actueel/nieuws/2015/mei/01/overheidsdienst-groningen-per-1-juni-2015-van-start> (accessed February 2021)

⁵⁴ Dutch original: “Wij willen ervoor zorgen dat bij het opstellen en uitvoeren van alle plannen en activiteiten rondom schade, versterking en perspectief voor Groningen de betrokkenheid van de bewoners en organisaties maximaal is.” See <https://gasberaad.nl/groninger-gasberaad/> (accessed February 2021)

Milieudefensie website 2014⁵⁵). Reflecting on this production cap of 30 bcm/year, Interviewee 6 from GBB said that 30 bcm/year was considered to be “quite something, and we thought if we ask for 0 that would be over the top [...] Thus, we want towards the 30. Of course, once we are at 30, we want towards 20, that is obvious. But for the short term towards 30. And I know that we had some quarrels with members. ‘Why 30, we have to go to 0, the tap must close’” (Interviewee 6⁵⁶). Another torchlight procession attracting around 700 people against the gas extraction plans for 2016 followed about a year later (Milieudefensie website 2016⁵⁷). The procession of February 2017 mobilised 5000 inhabitants for a ‘gas free future’ (Milieudefensie website 2017⁵⁸). These processions illustrate the shifting of frames from demanding a reduction of gas extraction towards stopping gas extraction. They were also one of the activities singled out by our interviewees. In relation to the torchlight processions, Interviewee 6 reflected on the collaboration of GBB with Milieudefensie: “We often collaborated with them. Milieudefensie has another standpoint than us. They want to stop gas extraction. No matter the disadvantages in the form of earthquakes, they want CO₂ out of society and no use of fossil fuels. But the GBB in Groningen had the same goals. In fact, Milieudefensie was piggybacking on the problems here. [...] They were experienced with torchlight processions and we have made use of that. Without them we could not have done it in this way”⁵⁹.

This report cannot outline the **broad array of different activities** by SIE-initiatives and focuses on those that were considered most important by the interviewees.

- By way of example for a more creative action, the campaign ‘**Knitting for Groningen**’ from November 2016 to March 2017 was mentioned. The Dutch were asked to knit a piece and send it to the campaigners as a sign of the ‘warm’ feelings they had for the people from Groningen. Putting these pieces together, a tiny house in the earthquake area was wrapped in a ‘warm cloth’ (Interviewee 5).

⁵⁵ See <https://milieudefensie.nl/actueel/fakkeltocht-groningen-uit-protest-tegen-gasbesluit-kamp-gaswinning-moet-veel-verder-omlaag> (accessed February 2021)

⁵⁶ Dutch original: “En dat vonden wij al heel wat dus, en wij dachten als we de nul gaan eisen dan is dat over de top. [...] Dus we willen naar 30 toe. En natuurlijk als we eenmaal op 30 zitten dan willen we naar 20, dat is logisch. Maar op de korte termijn naar 30. En ik weet dat wij toen met kregen met een deel van onze leden. “Waarom nou naar 30, we moeten naar 0, de kraan moet dicht”.

⁵⁷ See <https://milieudefensie.nl/actueel/veel-groningers-en-niet-groningers-de-straat-op-tegen-gasbesluit-van-minister-kamp> (accessed February 2021)

⁵⁸ See <https://milieudefensie.nl/actueel/een-vlammend-protest> (accessed February 2021)

⁵⁹ Dutch original: “Daar hebben we vaak mee samengewerkt. Milieudefensie zit er natuurlijk weer anders in dan wij. Hun gaat het vooral om het stoppen van de gaswinning. Dus ongeacht wat de nadelen ervan zijn in de vorm van bevingen, zij willen CO₂ uit de maatschappij hebben en geen fossiele brandstoffen meer inzetten. Maar de GBB had in Groningen hetzelfde doel. Milieudefensie lifte in feite mee op de problemen hier. [...] Ze hadden ervaring, met fakkeltocht en van die ervaringen hebben wij heel veel gebruikt gemaakt. Zonder hen hadden we dat niet zo kunnen doen.”

- More activist was the SIE-initiative, Schokkend Groningen, who **occupied several times a gas extraction site** to protest against gas extraction and the attitude of the government (RTV Noord website 2014⁶⁰, 2015⁶¹).
- As part of their strategy to continuously attract public attention to the situation, the GBB started publishing their **own actual newspaper** emphasizing the resident perspective on gas extraction as of 2016 (GBB 2016) – for more on their strategies see the *Textbox* introducing the GBB. Towards the end of this phase, the number of members of the GBB reached 4000 (GBB website 2021⁶²).

Another activity that was pursued by SIE-field actors was **taking legal action** against the Dutch government as well as against gas extraction company NAM. In the following, we highlight a number of these actions.

- The StWAG represented at that time 900 apartment owners and 12 housing cooperations and in their name filed **legal action against the NAM** in 2014 (RTVNoord website⁶³). The NAM should compensate for the value reduction of houses. In September 2015, the NAM was held responsible for the value reduction of houses notwithstanding sale or physical damage by the Court North Netherlands (Rechtbank Noord Nederland) (Stichting WAG 2021). In 2018, the StWAG also won the appeal and sent a subpoena including financial details in October 2019.
- In 2015, the GBB also started a process to press **charges against the NAM** for endangering the life of the population of Groningen – this is still ongoing in 2021 (Interviewee 6, GBB Website 2020⁶⁴) (GBB 2016). See Figure 7)

⁶⁰ See <https://www.rtvnoord.nl/nieuws/128987/Actievoerder-Schokkend-Groningen-bezet-gaswinningslocatie> (accessed February 2021)

⁶¹ See <https://www.rtvnoord.nl/nieuws/145922/Update-Schokkend-Groningen-bezet-gaslocatie-Leermens> (accessed February 2021)

⁶² See <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/> (accessed February 2021)

⁶³ See <https://www.rtvnoord.nl/aardbevingen/tijdlijn> (accessed February 2021)

⁶⁴ See <https://www.groninger-bodem-beweging.nl/nieuws/wordt-niet-vervolgd/> (accessed February 2021)



Figure 7: Overview of the lawsuit against the NAM by GBB (Source: <https://www.groninger-bodem-beweging.nl/nieuws/page/9/>)

- The same year, 40 parties including GBB and Milieudefensie had objected to the gas extraction plans of the Ministry of Economic Affairs for 2015/2016 and had filed applications for judicial review. **The Council of State** (Raad van State – RvS) ruled that gas extraction for said period had to be limited to 27bcm and therewith set aside the initial plans. The objecting parties had “*not counted on anything*” (Interviewee 6⁶⁵) for this legal action, but due to its positive ending they reconsidered: “*Then the Council of State came and in fact closed the tap a bit. And then we thought well, there is more possible. There is obviously a kind of feeling in the Netherlands that it needs to be different. And then we thought perhaps there is more possible.*” (Interviewee 6)⁶⁶. This was then also the first of a series of objections that were filed against all following draft gas plans that the Ministry of Economic Affairs presented (Interviewee 6).
- An important legal action to highlight is the one by societal organisations including Milieudefensie and GBB against the **draft gas extraction plan presented in June 2016**, where the Ministry of Economic Affairs planned to extract 24bcm/year for the coming five years (instead of issuing a yearly gas plan). An earlier draft of the gas extraction plan for 2016 had been dismissed by the Province of Groningen. For Milieudefensie, this signalled that “*gas extraction needs to be reduced. To prevent earthquakes and stop climate change, gas extraction in Groningen needs to go back to zero, at the latest by 2030*” (Milieudefensie website 2016⁶⁷). In November 2017, the Council of State overthrew the gas plan from 2016 and ruled that gas extraction was to be limited to 21,6 bcm for the gas year 2016/2017. It

⁶⁵ Dutch original: “*We rekenden nergens op*”

⁶⁶ Dutch original: “*Toen kwam de Raad van State en die draaide dus de kraan een stukje dicht, in feite. En toe dachten we wel, he er is meer mogelijk. Er is kennelijk wel een soort gevoel in Nederland dat het anders moet. Toen dachten we dat er wellicht meer mogelijk is.*”

⁶⁷ See <https://milieudefensie.nl/actueel/provincie-verwerpt-gaswinningsplan-nam> (accessed February 2021)

ruled that the Minister needed to reach a better substantiated decision – one that weighed both security of supply and the safety of inhabitants. The Council indicated that *“the minister’s reasoning should have explained more clearly the risk for people in the earthquake zone. Neither has he adequately explained why security of supply has been taken as the lower limit for the volume of gas to be extracted, despite uncertainty about the consequences. Furthermore, he has failed to make clear potential measures to limit the demand for gas.”* (Raad van State 2017)

Reflecting on this practice of taking legal action in 2021, Interviewee 6 outlined that *“We have done this [file objections] for each plan. [...] Now it does not make so much sense anymore, but we still do it because: point 1, people expect it from us. Point 2, gas extraction is still ongoing. It is not yet closed, so we go on with this until the tap is completely closed”*⁶⁸. Interviewee 5 also shared some scepticism: *“The court cases always felt a bit pointless, because we always won, but they did never have consequences, in either case not directly. It was not along the lines of ‘we won the court case, thus we close the gas tap’. A court case was won and then something happened behind the screens, something that we could not observe.”*⁶⁹

Both, the 2015 and the 2017 rulings by the Council of State outlined above took into account the findings of a **study by the Dutch Safety Board** (Onderzoeksraad voor Veiligheid) into the decision making regarding gas extraction in Groningen from February 2015. The authors concluded that the safety of the population had not been taken into account in decision making about gas extraction until the 2013 reassessment by SodM and KNMI. Rather, financial gain and security of supply had been leading concerns (Onderzoeksraad voor Veiligheid 2015). This study had a number of consequences. First, it contributed to an increasing shift in the dominant frames to take up safety of the population next to security of supply. Second, it also led to apologies directed at the population of the gas extraction area, first by the Minister of Economic Affairs in March, and then by the NAM in April (RTV Noord website 2021⁷⁰). That year also saw the dominant organisations of the gas sector reacting, mainly the Royal Association of Gas Producers in the Netherlands (de Koninklijke Vereniging van Gasfabrikanten in Nederland – KVGN, including Shell, Gasunie and Gasterra) and the Dutch Association for Oil And Gas Exploration and

⁶⁸ Dutch original: *“Dat hebben we dus tot nu toe bij elk besluit gedaan. [...] Het heeft nu niet zoveel zin meer hoor, maar we doen het nog steeds omdat: punt 1, de mensen verwachten dat van ons. Punt 2, dat de gaswinning loopt nog. Die is nog niet echt dicht, dus we blijven ermee doorgaan totdat het totdat de kraan echt helemaal dicht is”*.

⁶⁹ Dutch original: *“Die rechtszaken voelden altijd een beetje zinloos, want we wonden ze steeds, maar ze hadden nooit consequenties, in ieder geval niet direct. Het was niet van ‘we hebben de rechtszaak gewonnen, dus we draaien de gaskraan dicht’. Dan was een rechtszaak gewonnen en dan gebeurde er achter de schermen iets waar wij geen zicht op hadden.”*

⁷⁰ See <https://www.rtvnoord.nl/aardbevingen/tijdlijn> (accessed February 2021)

Production (Nederlandse Olie en Gas Exploratie en Productie Associatie – NOGEP, including the NAM). They organised a series of strategic discussions to safeguard their ‘licence to operate’ (Beckman and van den Beukel 2019). This led to a Code of Conduct for the industry to set up a broad and participatory consultation programme for new gas fields (ibid). The sector dialogues also led to the formulation of a policy brief in 2018 that framed natural gas no longer as default but as transition fuel until more sustainable alternatives are available (ibid.).

Divestment (2014- 2017)

During this period, the alternative frame largely stayed the same, but started opening up to not only focus on quantitative but also qualitative relations between the fossil fuel industry and society – thus those that cannot be expressed in numbers; i.e. money. The former had been taken up by a range of decentrally organised groups within a broader Fossil Free movement in the Netherlands. Next to universities, also cities, pension fund ABP and later specific sectors such as advertising, education and the cultural sector were targeted for their relations with the fossil fuel industry.

As of 2014, 350.org has supported the fossil free movement in the Netherlands with its primary goal being to “spread the Fossil Free divestment campaign in Europe” by “spreading the fossil free narrative” (Fossilvrij NL and 350.org 2017, 9). During this phase, the divestment movement grew steadily, with 2015 and 2016 being very active years in the Netherlands. According to Fossilvrij NL these were also the years when “some great successes were achieved [...] when active campaigns started on multiple Dutch universities, municipalities (like Amsterdam and The Hague) and the largest Dutch pension fund ABP. The ABPfossilvrij campaign, for example, managed to mobilise 13,000 pension holders to influence the 380-billion euro pension fund to prioritize climate policies. The strong fossil free movement that emerged in the Netherlands put the financial risks of investing in fossil fuels on the agenda of national media, investors and policy makers.” (Fossilvrij NL and 350.org 2017, 6).

Thus, numerous sub-groups emerged, each of which got engaged in different activities. In this report, we zoom in on two main activities: the ABPfossilvrij campaign as well as the activities of EUR Fossil Free in Rotterdam. During this phase, the movement also institutionalised through the official registration of a foundation that up to today remains the motor of different activities and the coordinator of the network, the Foundation Fossilvrij NL (FossilFree NL). The purpose of this foundation was “to support a loud, widespread and diverse civil society movement who criticizes the current role of the fossil fuel industry in our society and their financial ties with our public

institutions. Because the fossil fuel industry is driving the climate crisis, we aim to remove their social license to operate and weaken their power to create space for upscaling just climate solutions.” (Fossilvrij NL and 350.org 2017) – see also the box on Fossilvrij NL below.

Introduction to SIE-initiative: Fossilvrij NL [Fossil Free NL]⁷¹

Fossilvrij NL was officially founded in 2016 as a formalisation of the Dutch activities of 350.org.

Aim: It is a foundation with the aim to “*accelerate the transition towards a just economy based on a renewable, decentralised energy system. In order to achieve this, we are building a broad, diverse and bold civil society movement who decreases the power of the fossil fuel industry in our society, by breaking its ties with public institutions, by dismantling its social license and stop the development of any new and decrease existing fossil fuel infrastructure in the Netherlands and beyond.*” (Fossilvrij NL and 350.org 2017, 15)

Activities: Fossilvrij NL provides trainings for volunteers, communicates via traditional and social media, delivers talks at different occasions and venues, collaborates with like-minded organisations and engages in lobbying activities. Importantly, it provides funding for coordination and material to specific local or thematic campaigns. Over the last three years, priority campaigns included: Fossil Free Pensions, Fossil Free Amsterdam, The Hague and Groningen, Fossil Free Culture, Fossil Free Universities and DivestInvest NL.

Organisational structure and governance: These activities of Fossilvrij NL are run by a small group of staff (since 2018), supported by volunteers and led by Director Liset Meddens. The formal responsibility is held by the Board of the foundation (i.e. legal and financial issues, activities and governance conforming to statutes). The priorities for Fossilvrij NL are set by active participants of the movement through half-yearly meetings.

In 2017, seventeen local or thematic groups were part of the broader Fossil Free Movement in the Netherlands, these were focusing on two pension funds (ABP, PFZW), eight cities (Utrecht, Amsterdam, Nijmegen, Rotterdam, The Hague, Eindhoven, Groningen (incl. university), and Wageningen (incl. university)), four universities (University of Utrecht, University of

⁷¹ The information collected in this description were taken mainly from (Fossilvrij NL and 350.org 2017) as well as from the Fossilvrij Website if not stated otherwise.

Amsterdam & Hoogeschool Amsterdam, Maastricht University, Amsterdam University College) and finally three sectors (Culture, Education, Advertising). These seventeen groups are autonomous in organising their campaigns, since the movement has a decentralised structure.

Relations/Networks: Fossielvrij NL is part of the broader Dutch climate movement and has collaborated with other organisations in bringing people on the streets (Interviewee 4).

Changes over time: The SIE-initiative started with activities being employed by individuals that started to connect quite quickly. A coordinator for the Dutch activities was financially supported by 350.org. Since then, it has consolidated its activities through a formal foundation (2016) and employment of a small team (as of 2018). It has also diversified in terms of its sub-groups, which were first focused on cities or universities, but later also included groups that focused on certain sectors such as the cultural sector (Fossil Free Culture), the advertising sector as well as education.

The **ABPfossielvrij campaign** called on ABP (Algemeen Burgerlijk Pensioensfond), the pension fund for employees in the government and education sectors, to divest its funds from fossil fuel companies. ABP is the largest Dutch pension fund (and one of the bigger ones worldwide) and controls assets worth 300 billion Euro of which 10 billion are invested in fossil fuel companies including Shell, BP and Chevron (Fossielvrij NL website 2014⁷²). According to Interviewee 4 targeting pension funds was “*partly a strategic choice and partly just ‘hey this is my money’ as a starting point*”⁷³. Some of those initiating the campaign were themselves employees in the government and education sector and thus saving for their pensions via the ABP (Interviewee 4). Strategically, pension funds were an interesting target for two reasons: “*because of the immense investments these funds make and because in essence the money belongs to ordinary people which might be willing to call on their pension funds to green their portfolios*” (Bosman 2021, 3).

A first activity in February 2014 was organized by a group around Liset Meddens (Fossielvrij NL), Vatan Hüzeir (founder of EUR Fossil Free) and employees of DRIFT, a research institute at the Erasmus University Rotterdam (Fossielvrij NL website 2014⁷⁴, Interviewee 4, Interviewee 7), who developed a **sustainable voting guide** – this guide should help ABP members to understand which

⁷² See <https://gofossilfree.org/nl/press-release/financierings-stop-kolencentrales-gaat-rutte-fossielvrij/> (accessed January 2021)

⁷³ Dutch original: “deels was het een strategische keuze en deels was het een gewoon ‘hey dit is mijn geld’ startpunt”

⁷⁴ See <https://gofossilfree.org/nl/press-release/financierings-stop-kolencentrales-gaat-rutte-fossielvrij/> (accessed January 2021)

candidates for the ABP accountability body find sustainability an important topic. Preparing the guide involved interviewing the candidates and then recommending five of them for their perspective on sustainability (Bosman 2021). A second activity, also organised with Jeroom Remmers and Cindy Coltman (BothEnds) was a **letter signed by 17 organisations** (amongst others Urgenda, Greenpeace, Milieudefensie, Oxfam Novib), which warned against the carbon bubble and the associated investment risks (Bosman 2021) (Fossilvrij NL website 2014⁷⁵, Interviewee 4). In a reaction in a national newspaper, ABP said that it would continue investing in oil, gas and coal industries since there was an increasing demand for energy that could not yet be covered by renewable energy (Bouma 2014). It went on diminishing the risk: “*according to the biggest Dutch pension fund it is ‘very questionable’ if the risks pointed out by the environmental organisations really materialise*” (ibid). However, ABP still invited the campaigners for a meeting, which according to Meddens was a bit a “*skewed*” dialogue with very different perspectives on what sustainability actually stands for (as cited in (Tielbeke 2015)).

Collaborative efforts like the signed letter across the 17 organisations were not the norm. As put by Interviewee 4, supporters came “*from many different corners, from government, from universities, from in fact municipalities, and also you could say environmental activists and people that were concerned about the climate who were not connected to ABP but joined along the way. Yes, it was very bottom up.*”⁷⁶ What bound these different individuals together was the 350 narrative (Interviewee 4). However, there was also collaboration between the different sub-groups of Fossilvrij NL: “*Municipalities such as Amsterdam, Groningen, Boxtel and some other municipalities, also their mayors, wrote to the ABP ‘hey what are you doing with the investments. We want you to stop with fossil. That was also really important and that was a bit of a collaboration, often between local groups or local university groups and us. And sometimes it comes very spontaneous*”⁷⁷ (Interviewee 4)

In a next move, starting December 2014, ABP Fossilvrij organised a **petition that requested ABP to divest from fossil fuel energy companies signed by 13,000 ABP members**. The petition was handed over to ABP in March 2015 during a public event in Amsterdam with a seminar and guest speakers – including a press release that was picked up by newspapers (Bijlo 2018; Bosman 2021;

⁷⁵ See <http://gofossilfree.org/nl/wp-content/uploads/sites/14/2014/09/Brief-aan-ABPbestuur-Sept-2014.pdf> (accessed January 2021)

⁷⁶ Dutch original: “*meer zo vanuit verschillende hoeken, vanuit de overheid, vanuit universiteiten, vanuit inderdaad gemeenten [...] En ook wel zeg maar milieuactiviste en mensen die zich zorgen maken om het klimaat die helemaal niet verbonden waren aan het ABP zijn zijn daar gewoon bijgekomen. Ja dus echt super bottom up.*”

⁷⁷ Dutch original: “*Gemeenten als Amsterdam, Groningen, Boxtel en wat andere gemeenten, ook de burgemeesters daarvan, hebben naar ABP geschreven van hey wat zijn jullie aan het doen met die beleggingen. Wij willen dat jullie stoppen met fossiel. Dat zijn ook, Dat was ook heel belangrijk. Ja, en dat was een beetje samenwerking dan vaak tussen lokale groepen of lokale universteit groepen en ons zeg maar. En soms komt het ook heel spontaan.*”

Trommelen 2015). ABP accepted the petition and answered questions but would not divest (Bosman 2021). As reflected on by Interviewee 4: “*You are carrying a certain weight with so many people who reacted so quickly and we also had all experts talking and they all have said things like ‘it cannot be like this’ [...] thus ABP is a genius in absorbing*”⁷⁸. Consequently, all signatories were asked to send letters to ABP (Bosman 2021). Another meeting between ABP and Fossielvrij NL took place in September 2015. Recorded in a documentary movie, ABP Head of Investments Jeroen Schreur summarised the standpoint of ABP: “*What provides more benefits, thousands of different private individuals who have no interest whatsoever in what companies are doing, or a big investor who can use its influence on a company to contribute to the transition. We believe in the latter*”⁷⁹ (Kieft 2015). Just a month later, the ABP presented their **new policy for responsible investment** with stricter sustainability criteria, an increase of solution-oriented investments and a review of all companies in the portfolio to arrive at a reduction of 25% of the CO₂ emissions of companies in the portfolio. All the campaign activities were accompanied by a high media coverage in all major national newspapers as well as on national TV shows (Bosman 2021)⁸⁰ – just before the Paris Climate Conference the documentary movie on the work of the divestment movement featuring the work in the Netherlands was broadcasted (Kieft 2015).

All these activities had put **pressure on public organisations and cities** and also showed effects (although causal linkages are difficult to sustain). By way of example, as part of the 2015 Global Divestment Day, the city of Amsterdam was site of a cycling parade of 350 people who called upon the city to divest from fossil fuels (Fossielvrij NL and 350.org 2017). In November that same year, the city council started to research its ties with the fossil fuel industry (Tielbeke 2015) and July the year after, Mayor van der Laan calls upon ABP to divest (Bouma 2014). Around the weeks of the **Paris Climate Conference**, two other interesting announcements were made. First, eleven Dutch financial institutions (including bank ABNAMro and the investor of pensions for APB) announced their collaboration in the development of assessment methods with which to measure the impact of climate action on investments (Mommers 2016). Second, according to news coverage, the president of the Dutch Central Bank admitted that there “*is something as a carbon bubble*”⁸¹ (as cited in (Mommers 2016)). According to Mommers, the president said that there “*is*

⁷⁸ Dutch original: “*Je neemt al een zeker gewicht mee met zoveel mensen die zo snel hebben gereageerd en we hebben ook allemaal experts aan het woord gelaten die allemaal dingen hebben gezegd van hey dat kan zo niet. [...] dus ABP is ook geniaal in in het absorberen.*”

⁷⁹ Dutch original: “*Waar ben je meer bij gebaat, bij duizend verschillende particulieren die geen enkel interesse hebben in wat die bedrijven doen, of een groot aandeelhouder die met zijn vermogen zijn invloed kan aanwenden binnen zo een bedrijf om de transitie mee te dragen. Wij geloven in het laatste.*”

⁸⁰ A Lexis-Nexis search shows a peak in media-coverage for the term ‘divestment’ in the eight major newspapers or news magazines in 2015.

⁸¹ Dutch original: “*zoiets is als een carbon bubble*”;

too much invested in CO₂-containing resources and technology and there is a considerable and real risk that these need to be depreciated”⁸². This would be the same mechanisms that we currently witness with the coal industries. Also internationally, the movement was successful with one of the most surprising news being the divestment of the Rockefellerfonds in September 2014, worth 860 million dollars (Mommers 2016; Tielbeke 2015).

Zooming in on the activities at the Erasmus University Rotterdam, here Interviewee 7 renamed the group **into EUR Fossil Free** after having been connected with Liset Meddens and the work of Fossielvrij NL via Marjan Minnesma, director of environmental NGO Urgenda. In 2014, EUR Fossil Free had a meeting with the executive board of the EUR to share their concerns about fossil fuel investments. Two issues are noteworthy from this contact. Firstly, the chairman of the University made a statement to the ABP to be more critical about their investments and secondly, it allowed research to be done into the relations of the EUR with the fossil fuel industry (Interviewee 7). It then became relatively silent around the EUR Fossil Free group in Rotterdam – with its leading figure, Interviewee 7 driving the ABP Fossielvrij campaign until 2016.

However, also other university campaigns “*are difficult*”⁸³ (Interviewee 7). According to Interviewee 7, the reason was that they focused on a campaign that foregrounded the financial ties between universities and the fossil fuel industry. They had copied the US- and UK university campaigns, where students called upon their universities to divest their endowments, while Dutch universities typically do not have endowment funds (Bijlo 2018; Tielbeke 2015). According to Interviewee 7: “*The divestment movement in the Netherlands and elsewhere has too easily made a direct translation from the American cultural context to the Dutch cultural context. And has thereby overlooked, not on purpose, that there are completely different lines of influence and exposure here.*”⁸⁴ This led to the following challenge:

“Therefore, the campaign does not provide university administrators a model on which to ground meaningful climate action which also satisfies divestment campaigners. As a result, the campaigners have shifted their focus to calls for secondary ways of divestment. For example, campaigners at Utrecht University (successfully) convinced their university to ask the ABP pension fund – the fund that government and educational sector staff is obliged to

⁸² Dutch original: “te veel geïnvesteerd in CO₂-houdende grondstoffen en technieken en is het risico reëel dat daarop flink zal moeten worden afgeschreven.”

⁸³ Dutch original: “die lopen moeilijk”

⁸⁴ Dutch original: “De divestment movement in Nederland en elders heeft te snel te gemakkelijk een rechtstreekse vertaling gemaakt uit de Amerikaanse culturele context naar de Nederlandse culturele context. En heeft daarmee over het hoofd gezien, niet expres, dat er hier hele andere lijnen van beïnvloeding en exposure bestaat.”

use to build up pensions – to end its fossil fuel energy investments [...] However meaningful, these calls are prone to be disjointed as they (more or less) fall out of the divestment model. Also, they do not resolve the question how universities without endowment funds can take direct climate action. In short, then, the focus on fossil fuel divestment as a model for climate action by universities without direct investments has led to two major problems. Firstly, their administrators may not know how to take climate action in response to calls by divestment campaigners. Secondly, calls for secondary divestment, although meaningful, may be prone to remain incoherent and only allow for indirect and uncoordinated climate action by universities.” (Hüzeir and Fraser 2017, 7–8).

To address these issues, (Hüzeir and Fraser 2017, 8) propose that “*the divestment model for climate action at universities should be extended to also allow for a critical reflection on non-financial relationships with FFECs, in addition to direct financial investments in them*”. What Hüzeir thus suggested was to **no longer focus only on financial relations but extend the movement to all sorts of relations between fossil fuel companies and public institutions** (see also (Mommers 2017)).

In line with this focus on financial and other relations with the fossil fuel industry, and as initiator of the EUR Fossil Free campaign, he approached the executive board of the university again to inquire into the promise made in 2014 to allow research into the relations of the university with the fossil fuel industry, as well as into financial support for such research. According to Interviewee 7, “*this was a nice hook to restart the campaign from*”⁸⁵ and in 2015/16, he was busy securing funding and support for such a research. He reflects: “*And finally, after a very long tug of war, I got some financial support, a subsidy, and then I thought ‘okay this looks like they are open to such research’*”⁸⁶ (Interviewee 7). While the initial idea was to research all ties of the complete university with the fossil fuel industry as well as the renewable energy industry, this was eventually scoped down to the second-biggest faculty; the Rotterdam School of Management (RSM). This was due to a combination of having limited resources, preliminary research results and the importance of remaining as truthful as possible to the original EUR Fossil Free campaign.

⁸⁵ Dutch original: “*Dat is een mooi aanhakingspunt om de campagne weer vandaan op te tikken*”

⁸⁶ Dutch original: “*En uiteindelijk na super lang touwtrekken, kreeg ik wat financiële ondersteuning, een subsidie, en toen dacht ik ‘okay dit lijkt erop alsof ze open staan voor dergelijk onderzoek’*”

These reflections on the contextualisation of a US campaign to the Netherlands were also discussed within FossilVrij and 350.org more broadly. As reflected on by Interviewee 7:

“ [...] for us it was important from the outset not to solely focus on financial cooperation and that is because you know, or we were under the impression, that the financial connections, these are very concrete, they make it very clear how the partnership looks like. Because something has been paid to get something back. But we saw that there were also all sorts of qualitative ties, which also brought a performativity. [...] Yes, and if you realize that and you see on the other hand that Fossilvrij is mainly concerned with divestment and the international divestment movement as well. Then you see a problem. Because a focus on quantitative ties that they have, while we see a problem in qualitative ties, in addition to those quantitative, the financial, ties. So, then we innovated and I even proposed to the top of 350 to change the focus from 350, so that those qualitative ties would carry over into the campaign. [...] And that was respected and accepted, but in terms of campaign strategy it is of course good to give yourself a focus.”⁸⁷

5.3 Phase 3: 2015-2020 Regulatory successes and reoriented frames

During this phase, many of the initial and adapted claims of the SIE-initiatives became institutionalised through public or organisational policy and the initiatives reoriented their frames. For anti-fracking, regulatory success started in 2015, with the strategic environment assessment and an amendment that was filed by MPs to allow refusal of permits on environmental grounds. This quickly led to a change in the Mining Law that banned shale gas extraction in the Netherlands and to a dispersion of the field. For anti-Groningen gas, 2018 marked regulatory success when the Minister of Economic Affairs announced to reduce gas extraction in 2022 and to stop it by 2030. GBB, one of the main SIE-initiatives started re-orienting towards diligent implementation of these new regulations, while Milieudefensie started to campaign for stopping gas extraction also in other onshore smaller gas fields in the Netherlands. For divestment, successes had been booked with the campaign against pension fund ABP and from

⁸⁷ Dutch original: “ [...] voor ons was het van meet af aan van belang om ons niet alleen maar te richten op financiële samenwerking en dat komt omdat je weet, of wij waren onder de indruk dat de financiële verbindingen die zijn heel concreet, die maken heel duidelijk hoe het samenwerkingsverband er precies uitziet. Want er is iets betaald om iets terug te krijgen. Maar wij zagen dat er ook allemaal kwalitatieve banden waren, die ook een performativiteit met zich mee brachten. [...] Ja, en als je dat realiseert en je ziet aan de andere kan dat Fossilvrij zich voornamelijk bezighoudt met divestment en überhaupt de internationale divestment movement. Dan zie je dat een probleem. Want een focus op kwantitatieve banden, die zij hebben, terwijl wij zien een probleem in kwalitatieve banden, naast die kwantitatieve, de financiële, banden. Dus toen pleegde wij die innovatie en ik heb zelfs tot in de top van 350 voorgesteld om de focus van 350 te veranderen, zo dat die kwalitatieve banden in de verder campagne doorwerkten. [...] En dat werd wel gerespecteerd en geaccepteerd, maar campagne strategisch is het natuurlijk goed om jezelf een focus op te leggen.”

there they started acting upon the reoriented frames to reach broader audiences including other than financial ties.

Anti-fracking (2015-2020)

During this last phase, the main activities took place in the sphere of representative democratic institutions where eventually shale gas extraction is not considered a viable option anymore due to safety and environmental concerns as well as due to ambitions to becoming a 'gas free' country. This latter also excluded the framing of shale gas as a bridging fuel for the transition towards renewable energy sources.

In February 2015, the strategic environmental assessment (plan-MER) of shale gas exploration was published, which formed an important input to the structural vision shale gas and the structural vision subsoil. In April 2015, an **amendment was filed** by two MPs to the Mining Act: to make it possible to refuse permits related to mining exploration and production licenses on the bases of environmental grounds (Tweede Kamer der Staten-Generaal website 2015⁸⁸). About a year later, March 2016, a resolution in the Parliament was accepted that states that shale gas will be excluded as possibility from the Structuurvisie Ondergrond (STRONG) because shale gas exploration will be no option on land as long as the current energy agreement is in place (Tweede Kamer der Staten-Generaal website 2016⁸⁹). In January 2017, the **Mining Act is modified**, so that refusal grounds for permits related to the Mining Act extend to environmental grounds (Ministerie van Economische Zaken 2016). A year later, in February 2018, the Minister of Economic Affairs and Climate, Eric Wiebes, **bans the production of shale gas in the Netherlands** (Metze 2018a; Tweede Kamer Der Staten-Generaal 2018). This symbolised a new framing in the political arena: from considering shale gas and gas in general as a transition fuel, gas-extraction was now considered to delay the energy transition and to be symbolic for a gas addiction, and the Netherlands should become 'gas free' (Metze 2018a). In line with this decision of the Minister, MP Liesbeth van Tongeren (GroenLinks) files a resolution **to definitely exclude shale gas exploration as possibility** in the Netherlands because there is a lack of societal support (Tweede Kamer der Staten-Generaal website 2018⁹⁰; Groenlinks website 2018⁹¹). In March 2018, the resolution was accepted with 148 out of 150 votes.

⁸⁸ See https://www.tweedekamer.nl/debat_en_vergadering/plenaire_vergaderingen/details/activiteit?id=2015A01753 (accessed March 2021)

⁸⁹ See <https://www.tweedekamer.nl/kamerstukken/moties/detail?id=2016Z04737&did=2016D09770> (accessed March 2021)

⁹⁰ See <https://www.tweedekamer.nl/kamerstukken/detail?id=2018Z05374&did=2018D21638> (accessed March 2021)

⁹¹ See <https://groenlinks.nl/nieuws/succes-groenlinks-nederland-schaliegasvrij> (accessed March 2021)

During this phase, Cuadrilla was in need for a renewal of the exploration permits that were given out in 2009 by the Ministry of Economic Affairs. In July 2015, the Minister of Economic Affairs **refuses the prolongation of the exploration permit** for shale gas of Cuadrilla in the areas of Noord-Brabant and Noordoostpolder (Raad van State website 2018⁹²). Cuadrilla Resources took this decision to court and in March 2018 wins (ibid). The Minister had refused the prolongation of the permits largely because of environmental concerns, but the Mining Act at that time had not included environmental concerns as base for refusal yet. As a result, the Minister of Economic Affairs and Climate needed to make a new decision regarding the prolongation of Cuadrilla's permits, but again refused, this time on the basis of the newly changed Mining Act that did include refusal on the ground of environmental concerns (Duijnmayr, 2019⁹³).

With shale gas exploration no longer being a legal option, Shalegasfree Netherlands discontinued their organization in January 2021.

Anti-Groningen gas (2018-2020)

During this period, gas extraction from Groningen came to a hold and damage claims were handled under public law – this meant an institutionalisation in regulations, laws and policies of some of the main claims by the SIE-field actors. These have now reoriented their frames towards stopping gas extraction also from all smaller fields across the Netherlands, while GBB focuses on the diligent implementation of the claims for repair and reinforcement of houses.

The beginning of this phase was marked by an **earthquake in Zeerijp** with a severity of 3.4 on the scale of Richter in January 2018. As earlier the Huizinge earthquake, it brought several issues in motion or accelerated those. Within two weeks, GBB and Milieudedefensie organized another **torchlight procession** where 10,000 people walked the streets of Groningen and another 53,000 signed an online petition to show that “Enough = Enough” (Genoeg = Genoeg) (GBB Website 2021⁹⁴). This procession received broad media attention and was accompanied by solidarity activities also in other places of the Netherlands (ibid). According to the GBB that showed that “*damage resulting from earthquakes are no longer only a problem of Groningen but of the*

⁹² See <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RVS:2018:869> (accessed March 2021)

⁹³ See <https://energeia.nl/energeia-artikel/40083430/cuadrilla-krijgt-ook-in-herkansing-schaliegasvergunningen-niet-terug> (accessed March 2021)

⁹⁴ See <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/> (accessed February 2021)

Netherlands as a whole” (GBB Website 2021⁹⁵). This torchlight procession also attracted the board members of respected organisations such as the University of Groningen and speakers such as mayors and leading national level party members (Milieudefensie website 2018⁹⁶).

In the aftermath of the earthquake and the societal answer, policy events focusing on gas extraction followed up on each other quickly. On February 1st, the **State Supervision of the Mines (SodM) advised the government to drastically reduce gas extraction** to the earlier (in 2013) advised 12 bmc/year to assure the safety of the inhabitants of Groningen. As put by the Inspector General of the Mines, Kockelkoren in the SodM press release: *“The uncertainties of this estimate are big, we therefore moved towards the safe side. After all it is about the safety of the people of Groningen”* (SodM website 2021⁹⁷). In March 2018, taking up and going beyond this advice, the **Minister of Economic Affairs presented a new plan for gas extraction**, where gas extraction was reduced to less than 12 bcm/year in 2022 and gradually put on hold until 2030. As cited in a newsportal, the government considered on the one hand that the social licence for gas extraction was revoked: *“The consequences of gas extraction are no longer acceptable in society. The earthquakes cause damage to homes and buildings and create uncertainty among residents.”* (NL Times 2018⁹⁸). On the other hand, the government did not consider gas extraction to be a sustainable solution: *“Continuous gas extraction, flanked by massive compensation, repair and reinforcement operation, is not a sustainable situation.”* (ibid). Also referring back to the 2017 ruling by the Council of the State, the Ministry in its letter to the Parliament outlined that *“The economic and financial consequences are less relevant for the efforts of the government. As requested by the Council of State, safety of the inhabitants and security of supply are considerations”*⁹⁹ (Ministerie van Economische Zaken en Klimaat 2018a). For both sides, this consideration was not ideal and asked a number of other issues to be tackled, according to the Minister, these included: 1) procurement of additional nitrogen capacity (for adapting imported gas to specifications of Dutch gas devices), 2) switching of large-scale consumers, 3) accelerated reduction of the export of gas from Groningen, 4) making the build environment and greenhouse cultivation sustainable and 5) adapting the mining law to the principle of ‘never more than

⁹⁵ Dutch original: *“de aardbevingsschade is niet langer alleen een probleem van Groningen maar van heel Nederland”*, see <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/> (accessed February 2021)

⁹⁶ See <https://milieudefensie.nl/actueel/fakkeltocht-na-zware-aardbeving-groningen> (accessed February 2021)

⁹⁷ Dutch original: *“De onzekerheden bij deze inschatting zijn groot, wij zijn daarom aan de veilige kant gaan zitten. Het gaat immers om de veiligheid van de Groningers”*, see <https://www.sodm.nl/actueel/nieuws/2018/02/01/sodm-nieuwsbericht-nl> (accessed February 2021)

⁹⁸ See <https://nltimes.nl/2018/03/29/gas-extraction-groningen-reduced-zero> (accessed February 2021)

⁹⁹ Dutch original: *“Voor de inzet van het kabinet zijn de economische en financiële gevolgen van ondergeschikt belang. De afweging is er één tussen veiligheid en leveringszekerheid, zoals gevraagd door de Raad van State.”*

necessary'. On all these fronts, the government was acting but most are out of scope of this report. Focusing on the latter, **the gas law and mining law was adapted** in October 2018 to the principle of minimalizing gas extraction (Ministerie van Economische Zaken en Klimaat 2018d). During the same month, the **National Programme Groningen** with a budget of 1,15 billion Euro was established to provide future perspectives to the seven municipalities in the earthquake area after gas extraction had ended (Ministerie van Economische Zaken en Klimaat 2018b). A year later, in September 2019, the Minister announced to the Dutch Parliament that for the gas year 2019/2020, gas extraction was set to 11,8 bcm and therewith below the advised 12 bcm cap and that as of **2022 gas extraction was put to 0** in a year with average demand (Ministerie van Economische Zaken en Klimaat 2019). To compensate, more gas would be imported and made fit for Dutch devices through infusing it with nitrogen (Trouw website 2019¹⁰⁰). Another year later, in November 2020, the Minister of Economic Affairs announced proposals to **change laws so as to prohibit gas extraction from the Groningen field** after gas extraction would be at 0. Minister Wiebes said: *“The end is in sight: in due course gas extraction in Groningen stops. To make this decision irreversible, we arrange for the closure of the gas field to be reflected in the law. There will be an end to gas extraction plans and a formal end to the use of the Groningen field. A special moment, since it will soon not be possible anymore to legally extract gas from the Groningen field”* (Rijksoverheid 2020¹⁰¹). In the process towards ending gas extraction, Wiebes distinguished two phases: a first phase where the Groningen field is used as reserve, and a second phase when the field is definitely not used anymore and closed (Ministerie van Economische Zaken en Klimaat 2020a).

Also, in relation to the handling of damage and value reduction claims, this period showed a number of policy events and a consolidation of the field. The main change was that affected inhabitants did not have to raise and settle a damage claim directly with a private organization (NAM) anymore. Already in 2014, there was an attempt to move the handling of claims at a distance of the NAM, via the set-up of the Centre for Safe Living (CVW) – however that still meant that inhabitants had to deal with a private organization under private law. With the **governmental decision ‘Mining damage Groningen’ in January 2018**, the Ministry of Economic Affairs determined a protocol for mining damage and the **establishment of the Temporary**

¹⁰⁰ See <https://www.trouw.nl/nieuws/de-gaskraan-gaat-opeens-veel-sneller-dicht-dan-verwacht-b64c4fb1/> (accessed February 2021)

¹⁰¹ Dutch original: *“Het einde is in zicht: binnenkort stopt de gaswinning in Groningen. Om dat besluit onomkeerbaar te maken, regelen we de sluiting van het gasveld nu ook in de wet. Er komt een einde aan de vaststellingsbesluiten en een formeel einde aan de inzet van het Groningenveld. Een bijzonder moment, want dadelijk is het wettelijk niet meer mogelijk om gas te winnen uit het Groningenveld.”*, see <https://www.rijksoverheid.nl/actueel/nieuws/2020/11/24/definitief-einde-gaswinning-groningen-wettelijk-geregeld> (accessed February 2021)

Commission Mining Damage Groningen (Tijdelijke commissie mijnbouwschade Groningen – TCMG) (Ministerie van Economische Zaken en Klimaat 2018c). This Commission was to handle all damage claims under public law: “*The government pays the compensation and recovers the costs from the NAM which is liable for the damage as a result from gas extraction in Groningen. With the agreement, the financial guarantee for the damage payments are taken care of by the NAM. To ensure the independency of the Temporary Commission Mining Damage Groningen, the government will pay the costs related to the members and the housing of the Commission.*” (Rijksoverheid 2018¹⁰²). That meant that after this point, inhabitants could choose to have their claims handled either under public law or continue them under private law. The TCMG was established in March 2018 and had a budget of 18 billion available to compensate damages. Only, two years later, and in line with the then instated **Temporary Law Groningen 2020** (Ministerie van Economische Zaken en Klimaat 2020b) prepared to allow the handling of claims under public law, the TCMG was transformed in the **Institute Mining Damage Groningen** (Instituut Mijnbouwschade Groningen – IMG). The IMG is up to today responsible for handling damage claims caused by ground movement as a consequence of gas extraction at the Groningen field and gas storage Norg. Damage can be physical damage of buildings or objects, or immaterial damage. The IMG also implements the value reduction regulation, which allows a settlement payment to house owners that have suffered value reduction of their house between 2012 and 2019 due to being based in an earthquake area (IMG 2021¹⁰³). This regulation was created after the successful appeal of the StWAG against the NAM in court (Stichting WAG 2021).

The necessity for action to reduce or stop gas extraction and for different handling of damage claims was relentlessly put on the **public agenda** by SIE-field actors. Via their websites, they reported on policy changes or the progress of legal action but also shared life stories and pointed to implementation. By way of example, Milieudefensie posted a blog at the end of 2018 outlining a number of “shocking facts” including e.g. that at the end of 2018 only 4% of the more than 17,000 damage claims had been resolved or that up to 12 organisations had been busy with a damage claim (Milieudefensie website 2018¹⁰⁴). Next to the **ongoing legal appeals** against the yearly gas extraction plans of the Ministry of Economic Affairs as outlined under Phase 2 (Interviewee 6,

¹⁰² Dutch original: “*De overheid keert de schadevergoeding uit en verhaalt de kosten op de NAM die aansprakelijk blijft voor de schade als gevolg van de gaswinning in Groningen. Met de overeenkomst wordt de financiële dekking van de schade-uitkeringen door de NAM geregeld. Om de onafhankelijkheid van de Tijdelijke commissie mijnbouwschade Groningen te verzekeren, zal de overheid de kosten met betrekking tot de leden en huisvesting van de commissie voor haar rekening nemen.*”, see <https://www.rijksoverheid.nl/actueel/nieuws/2018/02/07/minister-wiebes-sluit-overeenkomst-met-nam-over-financiering-schadeprotocol-groningen> (accessed February 2021)

¹⁰³ See <https://www.schadedoormijnbouw.nl/waardedalingenregeling> (accessed February 2021)

¹⁰⁴ See <https://milieudefensie.nl/actueel/schokkend-groningen-dit-zijn-de-meest-schokkende-dingen-die-groningers-zijn-overkomen> (accessed February 2021)

Milieudefensie website 2018¹⁰⁵ and 2019¹⁰⁶), the GBB also has pledged for years for a **parliamentary inquiry** into the gas extraction and its consequences for Groningen (GBB 2020). After the proposal of MP van der Lee was accepted in March 2019, the parliamentary inquiry started in February 2021.

This period also saw more **radical actions, such as a week-long action camp** in August 2018 organized by the informal group Code Rood with some 700 attendants (Code Rood website 2021¹⁰⁷). The camp took place in August 2018, a time where one policy event was chasing the next. According to Interviewee 4, this was “*a period that everybody was humiliated and only promises were made but not fulfilled. And three new institutes were established that secretly were steered by the NAM*”¹⁰⁸. Code Rood invited for a “*big civil disobedience action*” (Milieudefensie website 2021¹⁰⁹) with the aim of: “*Just compensation and an end to gas extraction; real sustainable energy; an honest transition, a just world*” (Code Rood website 2021¹¹⁰). The actions included workshops, trainings, and discussions over gas extraction and a fossil-free society as well as a sit-in blockage of installations in Farmsum. In the course of the latter, the police intervened violently (RTV Noord website 2021¹¹¹) (Interviewee 5, Interviewee 6). This action camp was a collaboration between local, national and international activists and is considered to have contributed to a feeling of empowerment, that “*we can take it in our own hands [...] and we can affect the NAM, Shell where it hurts them*” (Interviewee 4¹¹²). Reflecting on the development of the activities, Interviewee 5 asserts that there had always been the discussion about which methods were appropriate but that “*at the end, everybody was so fed up*” that even radical activists such as Code Rood were welcomed (Interviewee 5¹¹³). Not only were people fed up, they also took on more radical activities: “*What you also saw was that an organisation such as the Groninger Bodem*

¹⁰⁵ See <https://milieudefensie.nl/actueel/gasbesluit-wiebes-toont-weinig-energie> (accessed February 2021)

¹⁰⁶ See <https://milieudefensie.nl/actueel/beroepschrift-gaswinningsbesluit>; <https://milieudefensie.nl/actueel/milieudefensie-en-groninger-bodem-beweging-in-beroep-tegen-gaswinningsbesluit> (accessed February 2021)

¹⁰⁷ See <https://code-rood.org/nl/2018/11/16/twee-jaar-code-rood-en-nu-oproep-voor-decentrale-bijeenkomsten/> (accessed February 2021)

¹⁰⁸ Dutch original: “*Dat was typisch in zo'n periode dat iedereen weer door het slijk werd gehaald en alleen beloftes werden gedaan die niet werden nagekomen. En weer drie nieuwe instituten werden opgericht die stiekem toch allemaal door de NAM bepaald werden*”

¹⁰⁹ See <https://milieudefensie.nl/actueel/gasbesluit-wiebes-toont-weinig-energie> (accessed February 2021)

¹¹⁰ Dutch original: “*Rechtvaardige schadevergoeding en het einde van gaswinning; Echt duurzame energie; Een eerlijke transitie, Een rechtvaardige wereld*” See <https://code-rood.org/nl/actieoproep/> (accessed February 2021)

¹¹¹ See <https://www.rtvnoord.nl/nieuws/198166/Lees-terug-Vijf-gewonden-bij-protest-in-Farmsum-politie-moest-optreden> (accessed February 2021)

¹¹² Dutch original: “*en heeft echt heel veel bijgedragen denk ik aan het gevoel van uh, we kunnen de zaken in eigen hand nemen [...] En we kunnen de NAM, Shell raken waar het ze pijn doet*”

¹¹³ Dutch original: “*maar zeker aan het einde, toen was iedereen het zo zat*”

Beweging each time again was confident in new processes and then repeatedly were disappointed. These people from the Groninger Bodem Beweging also radicalised. For example, with Code Rood, people from the Groninger Bodem Beweging took part. Those very ordinary citizens that you do not expect with these kinds of actions. Or that they did not take part, but supported it. The Groninger Bodem Beweging also donated money to Code Rood to make the action possible, as a sort of statement” (Interviewee 5¹¹⁴)

With many of the requested changes starting to get institutionalized, **SIE-initiatives reoriented their frames**. In September 2018, Milieudedefensie started to look beyond the Groningen field to other areas in the Netherlands. As part of the Small Field Policy from 1974, gas is extracted from smaller fields across the Netherlands and Milieudedefensie started a campaign to stop extraction from those fields: *“To restrain the warming up of our planet, we have to keep fossil fuels as much as possible underground. Let us start there, with the municipalities with small gas fields”* (Milieudedefensie website 2018¹¹⁵). Thus, after starting off with requesting a production cap of 30 bcm/year for the Groningen field with the torchlight procession in 2015 since everything else seemed unrealistic even for GBB and Milieudedefensie (Interviewee 5, Interviewee 6) – three years later Milieudedefensie calls for putting gas extraction on hold in all remaining onshore gas fields of the Netherlands. Interviewee 5 reflected on this change of frame: *“Yes, and I remember that back when we started the campaign as Milieudedefensie, that we did not dare to use such numbers. Thus, we did not dare saying that we need to go back to 30 bcm, while GroenFront did that. Other movements in Groningen did that. And we have been caught up by reality, since now we are at 1 or 1,5 bcm. Yes that was a very long discussion over how much gas do we need for security of supply [...] Something happened the last years for which we as radical environmental organization did not dare pleading for”¹¹⁶*. The GBB witnessed the same change in narrative: *“We started with a campaign to remove or stop the disadvantages of the gas extraction in Groningen. One of the parts of our goals was of course to stop gas extraction. And at the beginning, this seemed like an impossible thing, thus it was a goal, but a goal that was far away let’s say. Even that the gas tap*

¹¹⁴ Dutch original: “Wat je ook zag is dat een club als de Groninger Bodem Beweging eigenlijk iedere keer wel weer opnieuw vertrouwen had in nieuwe processen en dan steeds weer teleurgesteld werd. Die mensen zijn ook best geradicaliseerd van de Groninger Bodem Beweging. Er hebben bijvoorbeeld aan Code Rood ook mensen van de Groninger Bodem Beweging meegedaan. Van die super brave burgers die je niet bij dat soort acties verwacht. Of dat er zelf niet meegedaan wordt, maar wel gesteund. Groninger Bodem Beweging heeft ook geld aan code rood gegeven om die actie mogelijk te maken als echt een soort statement.”

¹¹⁵ Dutch original: “Om de opwarming van de aarde in toom te houden moeten we fossiele brandstoffen zoveel mogelijk onder de grond houden. Laten we daar mee beginnen bij de gemeenten met kleine gasvelden”, see <https://milieudedefensie.nl/actueel/meer-gas-uit-de-rest-van-nederland-dan-uit-groningen> (accessed February 2021)

¹¹⁶ Dutch original: “Ja, en ik weet nog toen wij als Milieudedefensie begonnen aan die campagne, durfden wij eigenlijk niet dat soort getallen te gebruiken. Dus wij durven niet te zeggen dat moet terug naar 30 Miljard kuub, terwijl GroenFront, die had dat gedaan. Andere Groningse bewegingen deden dat. En wij zijn echt keihard ingehaald door de realiteit, want nu zitten we op 1 of 1,5 kuub. Ja, was het een hele lange discussie over hoeveel gas hebben we nodig voor de leveringszekerheid? [...] Daar is er in de afgelopen jaren iets gebeurd wat wij, waar wij als radicale milieuorganisatie niet voor durfde te pleiten”

was closed a bit. We were really happy with that back then. Eventually it all went much quicker than we had hoped for. It turned out much better than expected.” (Interviewee 6¹¹⁷).

However, there are also doubts with regards to the reasoning of the government regarding the closure of the Groningen gas field – to which extent was this really about the safety of the people in Groningen and to which extent was it related to questions of economic efficiency. As outlined by MP Sandra Beckerman of the socialist party: “Everyone was really happy about the gas decision, a minister finally took a big step [...] But when Wiebes [the minister] suddenly stopped the reinforcement operation, the uneasiness grew among the people of Groningen. Everything indicates that he has made a simple calculation: it is cheaper to phase out gas extraction than to continue with the very expensive reinforcement of houses.” (cited on AD Website 2019¹¹⁸). Also the GBB for reacted provocatively by challenging whether it was really safety that was the guiding consideration or whether it was the decreasing gas prize and the societal call for sustainable energy. According to their website: “Or is it nevertheless the gas prize that is leading, as is the call by society for more sustainable energy sources? More energy (and thus money) is necessary to win gas due to the low pressure (production capacity decreases) and the gas prize is at an all time low, thus there is (much) less to be earned there. How profitable is gas extraction in Groningen then? And is that the reason that the NAM does not want to extract anymore after 2022?”¹¹⁹ (GBB 2020). Recognising the many achievements in relation to their goals, such as the stop of gas extraction, the independent handling of damage claims and reinforcement of houses, the GBB currently reorients to focus on the actual implementation of the handling of claims and reinforcement of houses and the many problems that arise in each of the municipalities (Interviewee 6).

Divestment (2018-2020)

This phase saw a clear uptake of both frames: Divestment as being about both, financial, and thus quantitative ties (Fossil Free Pensions), but also about qualitative ties (Fossil Free Culture, Fossil

¹¹⁷ Dutch original: “Wij zijn begonnen met een campagne om de nadelen van de gaswinning in Groningen [...] op te heffen dan wel tegen te gaan. Een van de onderdelen van de doelen die wij hebben, was natuurlijk wel de gaskraan dicht. En in het begin leek dat een onmogelijke zaak, dus het was wel een doel, maar wel een doel van ver weg, zeg maar. Zelfs dat de gaskraan dichtgedraaid werd een stukje. Daar waren we toen al heel blij mee. Uiteindelijk is het sneller gegaan dan we hadden gehoopt. Dus dat zat heel erg mee.”

¹¹⁸ Dutch original: „Over het gasbesluit was iedereen dolblij, eindelijk zette een minister een grote stap [...] Maar toen Wiebes de versterkingsoperatie plotseling stopzette, groeide bij Groningers het onbehagen. Alles wijst erop dat hij een simpele rekensom heeft gemaakt: het is goedkoper de gaswinning af te bouwen dan door te gaan met de zeer kostbare versterking van huizen.”; see <https://www.ad.nl/politiek/van-geniee-tot-brokkenpiloot-minister-wiebes-raakt-verstrikt-in-eigen-web-a5d1731a/> (accessed March 2021)

¹¹⁹ Dutch original: “Of is het toch de gasprijs die leidend is, net als de maatschappelijke roep om duurzame energiebronnen? Het kost meer energie (en dus geld) om gas te winnen door de lage druk (productiecapaciteit neemt af) en de gasprijs is historisch laag dus er wordt (veel) minder aan verdiend. Hoe rendabel is gaswinning in Groningen dan nog? En is dat dan de reden dat de NAM na 2022 niet meer wil winnen?”

Free Education, etc.). It also sees the framing being picked up by regular policy circles, rather than primarily media outlets.

In 2016, **350.org** indicated a reorientation of its focus towards subsidies for fossil energy – which is considered as “*divestment on national level*” since subsidies are “*a way to support the industry and to directly gain financial benefit from it*” (350.org cited in (Mommers 2016)¹²⁰). That same year also the G7 announced to stop fossil fuel subsidies (Mommers 2016). This was not immediately taken up in the Netherlands, where during this phase many activities were employed in line with the initial divestment narrative as well as in line with the broadening towards non-quantitative ties with the fossil fuel industry. **Fossilvrij NL as the coordinating backbone** of the movement received funding of € 1 million from the Postal Code Lottery from January 2018 until 2020 (Bijlo 2018), which allowed for the employment of a communication coordinator and an operational employee next to the director – and thus increased capacity (Fossilvrij NL 2019).

The **EUR Fossil Free campaign** started this phase by publishing the results of their research – clearly **indicating that fossil fuel industry, specifically Shell, BP, ExxonMobil and Gazprom, benefited from interacting with RSM**. This included seats on the RSM advisory board, a contractual agreement that allowed Shell to influence curricula and students’ profiles, and research sponsoring without disclosing this source of funding (Hüzeir and Fraser 2017). The Erasmus University has pressured the authors as outlined by Interviewee 7: “*Even before publication, I was called in by the university's crisis manager and the university's marketing manager. [...] They told me that there was a chance that I did not have intellectual property right of my report, because I had received a subsidy from EUR. So, they wanted to upgrade that subsidy to commissioning and make it look like they were my commissioner. While I had started a campaign at EUR and only received some support. So that was very bizarre*”¹²¹ (see also (Hüzeir and Fraser 2017, 35)). The research results had been broadly picked up in the media (such as Climate Change News, Follow the Money and the Correspondent but also mainstream newspapers). Some journalists did fact checks, also of the answer of the RSM which apparently was full of errors. As recalled by Interviewee 7: “*They also looked at the statement of the EUR, of the RSM, and they*

¹²⁰ Dutch original: : “*Dat is ‘divestment op het nationale niveau.’ De subsidies zijn ‘een manier om de industrie te stutten en er direct financieel gewin van te krijgen’*” (ECorr)

¹²¹ Dutch original: “*Nog voor publicatie werd ik op het matje geroepen door de crisismanager van de universiteit en de marketingmanager van de universiteit. [...] Die gingen mij vertellen dat er weleens een kans was dat ik niet in het bezit was van het intellectueel eigendom van mijn rapport, omdat ik subsidie had gekregen van de EUR. Dus zei wilden die subsidie opwaarderen tot opdrachtgeverschap en het doen lijken alsof zij mijn opdrachtgever waren. Terwijl ik op de EUR een campagne was begonnen en alleen wat steun had ontvangen. Dus dat was te bizar voor woorden.*”

*demolished it. Because that reaction really made no sense.*¹²². The EUR established the Commission Mols, which looked into the research and identified risks to integrity as well as recommended changes. These included for example deleting logos from study materials but also to establish a corporate register that would take stock of all links between RSM and companies. As put by Interviewee 7: *“But those old white men were basically saying the same thing as us, but with their stamp on it, it suddenly became legitimate. Disappointing in itself, but that's how the regime works”*¹²³. In December 2018, the Rotterdam School of Management stopped the agreement with Shell which allowed Shell to influence the curriculum (Fossielvrij NL 2020) (EM Magazine Website 2019¹²⁴).

There never came a structural research into the ties of all Dutch universities with the fossil fuel industry¹²⁵, which the campaigners had hoped for. Requested by the **Dutch Parliament**, the Minister of Education, Culture and Science reacted twice to the publication of the report 2017 (Tweede Kamer der Staten-Generaal 2017). Her bottom line was that she trusted the self-cleansing capacities of academia and that she would await the report of the Commission Mols before deciding whether to ask the Inspectorate of Education to intervene (EM Website 2017, 2018¹²⁶). Based on these reactions by the Minister, a ‘thirty members of parliament debate’ took place focusing on the relations between universities and the fossil fuel industry. After the recommendations of the Commission Mols had been accepted and implemented by the EUR, the Minister of Education, Culture and Science concluded in another statement that this independent report and the implementation of all recommendations were witness to the self-cleansing capacity of academia (Tweede Kamer der Staten-Generaal 2018) (EM Magazine Website 2018¹²⁷). As summarized by Interviewee 7, during the parliamentary debate *“It was actually said ‘hey, if this was carried out at EUR, such a research and that all these bizarre things come out, what is it like in the rest of the Netherlands? And is there no need to carefully examine what kind of partnerships there are at other universities?’ But the government, the coalition did not want that*

¹²² Dutch original: *“Die hebben ook gekeken naar de verklaring van de EUR van de RSM, en die hebben de reactie met de grond gelijk gemaakt. Want die reactie die sloeg echt nergens op”*

¹²³ Dutch original: *“Maar die oude witte mannen zeiden dus eigenlijk hetzelfde als wij, maar met hun stempel erop werd het ineens legitiem. Teleurstellend in zichzelf, maar ja zo werkt het regime”*

¹²⁴ See <https://www.erasmusmagazine.nl/en/2019/02/27/rsm-ends-controversial-contract-with-shell/> (accessed March 2021)

¹²⁵ Only a group of students of the University of Groningen had started to collect data but eventually gave this data to Follow the Money to finish the research (Interviewee 7).

¹²⁶ See <https://www.erasmusmagazine.nl/en/2017/09/11/bussemaker-wil-nog-geen-onderzoek-naar-banden-tussen-universiteiten-en-fossiele-industrie/> and <https://www.erasmusmagazine.nl/en/2018/06/27/zelfreinigend-vermogen-aanwezig-bij-erasmus-universiteit/> (accessed March 2021)

¹²⁷ See <https://www.erasmusmagazine.nl/en/2018/06/27/zelfreinigend-vermogen-aanwezig-bij-erasmus-universiteit/> (accessed March 2021)

and said ‘well this could be an incidental thing, this doesn't necessarily have to be structural, and there is a self-cleaning ability in the science system.’¹²⁸

For **other activists and campaigners** however, the research was inspiring on the one hand because it looked into qualitative ties of an organization with the fossil fuel industry – something that had not been done before, and on the other because it provided a reproducible methodology for how to research such ties (Interviewee 7). Regarding the focus on qualitative ties, Interviewee 7 says: “*I must say that Fossilvrij NL has very much embraced that narrative. And local groups, not necessarily consciously, but that has been a kind of internal consideration, of ‘uh damn there are all those other lines along which that cooperation is influenced by fossil companies’*”¹²⁹. For example, Fossil Free Education focuses on the influence of the fossil fuel industry on children through ‘educational’ activities. Similarly, Fossil Free Advertising targets the influence of advertising by fossil fuel energy companies in the public space.

Zooming in on the ABP campaign, a number of new activities were employed. In May 2017, the campaigners issued a **report sharing research results into the investments of ABP** specifically with regards to the fossil fuel industry (Both Ends, Urgewald, and Fossilvrij NL 2017). Two more of these reports followed, one in May 2018 (Both Ends, Urgewald, and Fossilvrij NL 2018) and one in September 2019 (Both Ends et al. 2019). The aim of the first report was threefold: to inform the pension savers about how their savings are being invested, to confront ABP to change this situation and increase its divestment ambitions and finally to raise awareness with the broader Dutch public. These reports are attempts to increase transparency of reporting, and “*can be considered a sort of ‘shadow’ report to ABP’s own Sustainability and Responsible Investment reporting*” (Both Ends, Urgewald, and Fossilvrij NL 2017, 5). The reports outline how many peers of ABP are moving towards divestment and decreasing the CO₂-emissions of their portfolios, while ABP’s investment in the fossil fuel industry does not show much movement. They also show how the devil is in the detail of reporting. As outlined in the 2019 report “*ABP claims that the carbon footprint of its equity portfolio has diminished by 28% as compared to 2014. But this is just a small part of the picture. Equity only comprises 33% of ABPs portfolio and ABP only calculates the direct operational (‘scope 1’) and the supply chain (‘scope 2’) emissions of its equity portfolio. The*

¹²⁸ Dutch original: “*Er werd eigenlijk gezegd ‘hee, als dit aan de EUR is uitgevoerd, zon’ onderzoek en dat er allemaal van die bizarre dingen uitkomt, hoe zou het dan in de rest van Nederland zijn? En is het niet nodig om goed tegen het licht te houden wat voor samenwerkingsverbanden er zijn bij andere universiteiten? Maar de regering, de coalitie wilde daar niet aan die zei ‘nou dit kan een incidenteel iets zijn, dit hoeft niet per se een structuur te zijn, en er is een zelfreinigend vermogen bij de wetenschap’.*”

¹²⁹ Dutch original: “*Ik moet zeggen dat fossiel Vrij NL dat narratief wel heel erg heeft omarmt. En lokale groepen, niet per se bewust, maar dat is toch een soort interne overweging geweest, van ‘eh verdomme er zijn allemaal andere lijnen waarlangs die samenwerking wordt beïnvloed door fossiele bedrijven’*”

calculations do not include the emissions from the use of sold products ('scope 3'). Not evaluating that third scope, particularly in the case of fossil fuel companies, obscures the actual climate consequences." (Both Ends et al. 2019, 3). According to Interviewee 4, these reports "helped a lot, on the one hand to gain again and again media attention on the topic, and on the other to also stay in conversation with ABP, and the duplicity of what they said and not did"¹³⁰. In their annual report, Fossilvrij NL indicates that especially the 2019 report did not lead to the desired media attention but provided the opportunity to sit around the table with ABP again. It also has led to a **parliamentary debate** about ABP's investment in fossil fuel. The first year that they had not issued a report, the public broadcasting station, NOS, released their own research (Interviewee 4). In 2021, Fossilvrij NL picked up on this thread again and researched the role of the ABP in the energy transition (Fossilvrij NL 2021).

Next to continuing to target ABP, also other pension funds became the target under a broader campaign labelled **Fossil Free Pensions**. In 2017, **the Pension Climate Label (Pensioensklimate-label) was launched**, which was a new ranking that should stimulate pension funds to align their investment policies with the Paris goals. During a public event in Amsterdam, the best pension fund (scoring a C) received an award. The idea behind this label was "*that the funds will be stimulated with this new ranking to align their policies with the [Paris] Agreement. The funds manage about € 1.300 billion (twice the GDP) assets of their members. The choices that funds make have an influence on whether or not the Paris goals will be reached*" (Fossilvrij NL website 2017¹³¹). Interviewee 4 added that they had started with this label also for other reasons: "*partly because there were people who wanted to join [the campaign] but were at other funds, partly because we thought 'ABP that is such a Moloch. There will not be movement. We see whether we can have them be overtaken by smaller players'*."¹³² In a reaction, the Federation of pension funds outlines that pension funds are monitoring their investments and that this is an important topic, but since it "*asks for a broad approach which goes beyond just deinvesting from fossil fuel companies*" (Federation of Pension Funds 2021¹³³) also international standards would be needed.

¹³⁰ Dutch original: "En dat hielp heel erg om enerzijds toch weer steeds media aandacht daarop te krijgen, maar ook om in gesprek te gaan met ABP en de dubbeheid eigenlijk van wat zij zeiden en niet deden"

¹³¹ Dutch original: "de fondsen met deze nieuwe ranking gestimuleerd worden om hun beleid in lijn te brengen met dit akkoord. De fondsen beheren in totaal ruim € 1.300 miljard (twee keer het BNP) vermogen van haar deelnemers. De keuzes die de fondsen maken hebben invloed op de doelstellingen van Parijs gehaald worden, of niet", see <https://gofossilfree.org/nl/press-release/pensioenfondsen-investeren-in-strijd-met-klimaatdoelen-parijs/> (accessed January 2021)

¹³² Dutch original: "deels omdat er mensen waren die wilden aansluiten die bij andere fondsen zaten, deels omdat we dachten van ja ABP 'Dat is zo'n moloch, Daar gaat geen beweging in zitten, We kijken of we ze niet door kleinere spelers kunnen laten inhalen'."

¹³³ Dutch original: "optiek om een brede aanpak vraagt die verder gaat dan alleen het desinvesteren in fossiele energie bedrijven", see <https://631nj1ki9k11gbkx39b3qz-wpengine.netdna-ssl.com/nl/wp-content/uploads/sites/14/2017/11/antwoord-pensioenfederatie-klimaatlabel.pdf> (accessed January 2021)

As of 2018, also the **pension fund for the care and wellbeing sector (PFZW)** was targeted. Back in 2015, the PFZW had promised to divest from coal within five years and reduce its fossil fuels portfolio. But despite this promise, a FossilVrij report showed that it had increased its investments in the fossil fuel industry at the end of 2018 (European Pensions Website 2019¹³⁴). That same year, PFZW reconfirmed its commitment to halve the total CO₂-emissions of its portfolio by 2020. Like APG (that invests for ABP), PGGM, the investor for PFZW, followed the strategy of spreading risks and talking with companies (rather than complete divestment) – ABP reconfirmed this strategy still in 2020 when it abstained from voting at the shareholder’s meeting of Shell (ABP website 2020¹³⁵). Similarly as with the ABP Fossilvrij campaign, also for PFZW a second report was issued in 2019 (Fossilvrij NL 2020)^f. That year also saw the first report into the ties of the **pension fund for the food service industry** as the third major pension fund to be targeted (Fossilvrij NL 2020).

Other actions included the organisation of **debates, such as in February 2020 at Maastricht University** (Fossilvrij website 2020¹³⁶). That same year saw ABP moving: at the start of 2020 ABP promised to reduce their investments in tar sand and coal. The ABP Accountancy Board played then an important role to hold them to this promise and to not only include black but also brown coal (LVOP website 2021¹³⁷) into their sustainable investment policy for the next five years (ABP 2020). However, such moves forward are hard work. Reflecting back on their impact with the divestment movement in the Netherlands, Interviewee 4 **indicates a paradigm change: “surely in the world of pensions”**¹³⁸. What has been challenged according to Interviewee 4 is *“the image that your investments are neutral, and that your investments do not have ethical consequences, and that it is activist to choose.”*¹³⁹. He adds that he has met managers of pension funds *“who were very active with greening their funds. [...] They really achieve something. That*

¹³⁴ See <https://www.europeanpensions.net/ep/Environmental-group-finds-PFZWs-fossil-fuel-investments-increased.php> (accessed March 2021) and here: <https://631nj1ki9k11gbkx39b3qz-wpengine.netdna-ssl.com/nl/wp-content/uploads/sites/14/2019/12/20191208-Definitieve-rapport-Zorg-en-Welzijn-Fossilvrij.pdf> (accessed March 2021)

¹³⁵ See <https://www.abp.nl/over-abp/actueel/nieuws/abp-kiest-voor-concrete-actie-bij-shell.aspx> (accessed March 2021)

¹³⁶ See <https://gofossilfree.org/nl/lets-talk-about-pensions-abp-is-gambling-with-dangerous-and-risky-investments/> (accessed March 2021)

¹³⁷ See <https://lvop.nl/2021/02/abp-bouwt-nu-ook-beleggingen-in-bruinkoolmijnen-af/> (accessed February 2021)

¹³⁸ Dutch original: “zeker in de pensioenwereld”

¹³⁹ Dutch original: “Het beeld dat je neutraal kan beleggen, en dat dat dat jouw belegging geen ethische consequenties heeft, en dus ook dat het activistisch is om te kiezen”

was important. And they were supported, maybe not directly by us, but surely by the general framing which we got started in the Netherlands.”¹⁴⁰.

Next to institutional investors, a new **campaign focused on private investors, the ‘DivestInvest Pledge’**. In collaboration between Both Ends and FossilVrij NL, this pledge targeted wealthy individuals to divest from fossil fuels (Fossilvrij Website 2019¹⁴¹). In March 2019, 22 signees, worth €200 million private wealth, agreed to divest within three to five years and to invest in sustainable alternatives were celebrated (Fossilvrij NL 2020; Groot 2019). One of the major cross-cutting activities during this phase was the organization of the **Global Divestment Mobilisation** in May 2017, where “*actions were organized at five universities, three pension funds, on the beach in the Hague and at ING bank in Amsterdam*” (Fossilvrij NL and 350.org 2017, 11). One of the actions included was the **Drop the Shell performance**, which exposed the sponsorship ties of Shell to the VanGogh Museum (Bijlo 2018; Fossilvrij NL and 350.org 2017). This performance was organised by the sub-group Fossil Free Culture, some members of which got arrested in the cause of the performance because of disturbing local peace (Fossil Free Culture website 2017¹⁴²). More than a year later, the VanGogh Museum, along with two others announced that they ended their sponsorship relation with Shell (Fossil Free Culture website 2018¹⁴³). And another year later, also the Dutch Concert Hall (Concertgebouw) ends its sponsorship relation with Shell, leading to the declaration of a ‘fossil free Museum square’ in Amsterdam (Fossilvrij NL website 2020)¹⁴⁴.

Looking back, Interviewee 4 reflects that divestment “*was a topic that was not yet on the agenda in the Netherlands, and we have put it on the agenda in the Netherlands*”¹⁴⁵ He points out that this topic has been “*picked up very broadly*”¹⁴⁶ including by universities, municipalities, pension funds and the Dutch Central Bank (De Nederlandsche Bank - DNB) but that it also concerns insurances and banks. By way of example, the Dutch bank ING announced in 2017 that it would not provide loans to coal power stations anymore after 2025 (Bijlo 2018) and the political party D66 was to

¹⁴⁰ Dutch original: “*die heel actief bezig waren met het vergroenen van hun fonds.[...] Zij krijgen echt iets voor elkaar. Dat was belangrijk. En zij zijn misschien niet direct door ons, maar zeker door de algemene framing die wij hebben geholpen in Nederland op gang te brengen, zeker daarin geholpen*”

¹⁴¹ See <https://gofossilfree.org/nl/press-release/affluent-dutch-individuals-divest-200-million-in-personal-wealth-from-the-fossil-fuel-industry/> (accessed March 2021)

¹⁴² See <https://fossilfreeculture.nl/portfolio/drop-the-shell/> (accessed March 2021)

¹⁴³ See <https://fossilfreeculture.nl/news/shell-dropped/> (accessed March 2021), see also <https://www.theartnewspaper.com/news/shell-sponsorship>

¹⁴⁴ See <https://gofossilfree.org/nl/concertgebouw-bevrijd-van-shell/> (accessed March 2021)

¹⁴⁵ Dutch original: “*Het was een onderwerp wat in Nederland nog niet op de agenda stond, en we hebben het in Nederland op de agenda gezet*”

¹⁴⁶ Dutch original: “*dat best breed is opgepikt*”

initiate a bill to let employees and those entitled to a pension decide over investment policies in March 2018 (ibid.). Also the universities picked up on the topic and as of 2018, increasingly **scientific research** into the claims of the movement are published (Apfel 2015; Bergman 2018; Blondeel 2019; Braungardt, van den Bergh, and Dunlop 2019; Green 2018; Hansen and Pollin 2018, 2020; Plantinga and Scholtens 2020; Rempel and Gupta 2020)). (Plantinga and Scholtens 2020) for example show that divesting from fossil fuel companies does not increase the financial risk as was long one of the arguments against divestment.

Regulative, normative and/ or cultural cognitive institutions

The SONNET team is interested in building an understanding of how dominant institutions within the ‘outside’ institutional environment influence the emergence and development of social innovation in energy – framings against anti-fossil fuel energy pathways. Institutions are made up of regulative, normative and cultural-cognitive elements. They are tacitly or explicitly agreed upon rules constraining or enabling activities of actors that provide stability and meaning to social life. These can be: 1) Regulative institutions: laws, rules, standards, policies, 2) Normative institutions: norms and value systems, and 3) Cultural-cognitive institutions: shared conceptions of reality, binding expectations, and common beliefs.

Regulative institutions, including laws, rules, standards, or policies have influenced the emergence of at least the framings against gas extraction discussed here – since these were directed against specific regulative institutions. Anti-fracking frames were directed against ‘handling’ of shale gas extraction like any other type of gas extraction and thus as falling under the current Mining Law and the ‘Small-field policy’. Anti-Groningen gas frames in the beginning were directed against standard practice of having to handle damage claims with a private party (NAM) rather than dealing with damage and value reduction as a public cause. SIE-field actors have been playing out different policies and procedures against each other, especially in court cases (e.g. when putting the fracking permit on hold due to procedural reasons; or when appealing against the gas extraction decisions of the government on grounds of these not outlining how the safety or citizens is assured). Throughout the years, the rulings of the Council of State for example have shaped the anti-Groningen gas extraction field in that it accelerated the developments towards not only reducing gas extraction but bringing it to a halt rather quickly

Normative institutions, including norms and value systems have also had their influence. These institutions are key for actors of the divestment framing, who have been referred to as

‘norm entrepreneurs’ (Braungardt, van den Bergh, and Dunlop 2019): they question both moral norms and financial norms and try to change them. Their activities and frames are directed against the value system underlying financial investment in the fossil fuel industry. The norm was to consider such investments as profitable now and in the future, and that they help to spread the financial risks within investment portfolios. They also take policy agreements such as the Paris climate agreement and the norms they establish serious since part of their frame is to link climate change policies and decisions on financial investments.

Cultural-cognitive institutions, including shared conceptions of reality, binding expectations, common beliefs, were for example shaping the development of the anti-Groningen gas extraction, where the shared belief that gas extraction from Groningen cannot be stopped was so strong that even SIE-initiatives did not dare to challenge it at the start. The rapid change of this shared belief in different parts of society helped to accelerate the stop of the gas extraction.

Key changes in the SIE-field over time

Since the three framings against fossil-fuel based energy pathways have a rather independent history, it is challenging to pick key changes that either influenced the emergence and development of the SIE-field as whole or that co-shaped the SIE-field and ‘outside’ institutional environment.

A key change in the field is when the activities and frames were going beyond specific localities to reach a broader nation-wide public. This happened for all three framings. For anti-fracking this happened in 2012, when the campaign by Milieudefensie (a national NGO) takes off and when ShaleGasFree Netherlands is founded. It was also the year, when activists within the potential extraction location Noordoostpolder started to organise. Noordoostpolder is located in a different province than the locations that had been on the radar before. For anti-Groningen gas, this took place in 2014 when a new governmental decision was taken and also Milieudefensie got involved. For divestment, this was rather quickly after the start of the framing in the Netherlands with the start of a national campaign targeting the ABP pension fund which acts nationwide. The nationalising of the activities and frames meant linking local frames such as environmental or physical damage or safety of the population with nationally interesting frames such as the future of energy supply and the role of gas in the overall

energy mix. It thus pulled the claims out of the ‘private’ into a public sphere. For the divestment movement it was about making the investment decisions of ABP matters of public interest by linking it with climate change. We took this key change in the field to mark the start of another phase in its development.

Another key change for the SIE-field and then specifically the anti-gas extraction framings came from the earthquakes taking place in the gas extraction area in Groningen, specifically the one in 2012 in Huizinge. With 3.6 on the scale of Richter, it was of a magnitude that had not been considered possible. Therefore, it was a turning point regarding the frames that actors were using: from a focus on the physical and emotional damage and its compensation, to safety. As put by Interviewee 1 in relation to anti-fracking: *“they [inhabitants of Boxtel] saw the earthquakes in Groningen, also saw that the people in Groningen were left alone. [...] this spurred the unrest here as well”*¹⁴⁷.

A final key change to mention here is when many of the initial and adapted claims of the SIE-initiatives became institutionalised and they reoriented their frames. For anti-fracking, regulatory success started in 2015, with the strategic environmental assessment; and an amendment was filed by MPs to allow refusal of permits on environmental grounds. This quickly led to a change in the Mining Law that bans shale gas extraction in the Netherlands and to a dispersion of the field. For anti-Groningen gas, 2018 marked regulatory success when the Minister of Economic Affairs announced to reduce gas extraction in 2022 and to put it on hold until 2030. This meant that GBB, one of the main SIE-initiatives started re-orienting towards diligent implementation of these new regulations while Milieudefensie started to focus on stopping gas extraction also in other onshore smaller gas fields in the Netherlands. For divestment, successes had been booked with the campaign against pension fund ABP and from there they started reorienting. On the one hand focusing on other pension funds and other kinds of investors, and on the other hand to not only focus on financial relations but also on all sorts of all relations between the fossil fuel industry and society, by e.g. focusing on culture or research institutes.

Institutional work conducted by SIE-field actors and other field-actors

¹⁴⁷ Dutch original: *“die [bewoners Boxtel] zagen de aardbevingen in Groningen, zagen ook dat Groningers in de steek gelaten werden, [...] dat wakkerde de onrust hier zeker ook aan”*

Institutional work refers to the activities of actors that aim to create, maintain and disrupt institutions (i.e.: regulative, normative and/ or cultural-cognitive). Examples of institutional work are: 1) Attempts to influence policy makers and the general public through direct lobbying, research reports, positioning papers, advertising, and the setting of technical standards and 2) Attempts to influence informal institutions, such as values, norms, binding expectations, common beliefs, habits, and routines, among the wider public (Arenas 2017). Such institutional work, specifically the practices of institutional work is what SONNET is interested in, the why, how, when, by whom and where of these practices, and what influences them. In the following, we outline a number of examples of institutional work within the field of ‘framings against fossil fuel energy pathways’.

The practices that the campaigners engaged in to challenge and disrupt existing institutions were manifold:

- organising torchlight processions, demonstrations or action camps, e.g., Milieudefensie organised anti-gas extraction demonstrations in The Hague where the parliament has its seat, or Code Rood organised an action camp in Groningen
- organising (social) media campaigns, creating own media outlets, issuing press releases; e.g. the GBB issued their own quarterly newspaper that was spread in the affected communities; all three SIE-initiatives (GBB, Fossilvrij NL, Shalegasfree Netherlands) had a website that documented all their activities over years
- lobbying with local, provincial and national politicians; e.g. with MPs from the green-left party in the case of shale gas
- issuing research reports; e.g. the four research reports about the investment of pension fund ABP in the fossil fuel industry or the research into the relations between the Erasmus University with that same industry
- launching petitions; e.g. the online petitions asking ABP to stop investing in the fossil industry, and the government to stop gas extraction in Groningen
- lobbying and taking part in official deliberation structures; e.g. GBB and its participation in the societal steering committee or the dialogue platform (to name two out of many), or Shalegasfree Netherlands and its participation in the Sounding Board of the research into the consequences of shale gas extraction
- communication through art

Through these practices, they tried to challenge and disrupt several institutions.

- Specifically cultural-cognitive institutions, such as general public discourse and existing dominant frames regarding fossil fuels (e.g. against shale gas extraction, towards reducing and stopping gas extraction in the Groningen field, toward compensation of damage and reinforcement of houses, to consider investments as a tool for climate activism).
 - Divestment: Divestment has become a much more known frame
 - Anti-Groningen gas: ‘gas-free’ has become a broadly accepted frame that steers policies
 - Anti-Fracking: *ibid*
- These practices were also meant to challenge and disrupt regulative institutions, and the processes towards arriving at these, such as policy making and law amendments (e.g. against the mining law, small field policy).
 - Divestment: ABP has adapted its investment policies
 - Anti-fracking: Mining law has been adapted, shale gas exploration is not a legal option anymore in the Netherlands
 - Anti-Groningen gas: Mining law has been adapted, gas extraction stops in the Groningen field in 2022 in years with regular winters
- Also, normative institutions as in norms and value systems.
 - Divestment: Fossilvrij NL and the ABP Fossilvrij campaign challenge the current norms of the financial and investment sector, namely the perception that investments are neutral and that “*your investments do not have ethical consequences*” (Interviewee 4). The Dutch National Bank, a norm providing organization, started acknowledging the carbon bubble argument as a risk for investments.

The change of institutions did happen gradually for the anti-Groningen gas framing. As put by Interviewee 5 “*it all went fairly gradually. Yes, they said always ‘it is not possible’, to reduce gas extraction, because we do not have alternatives. Yes, and then it turns out that there are. That were a lot of, often very technical, discussions about the quality of the gas [...]. But it also had a lot to do with exports. The Netherlands had long term contracts with other countries to supply gas [...] and about these contracts, they always said that these ‘cannot be broken open’, but it turned out that they could. It turned out that more gas could be imported [...] Thus, that*

all went very gradually. Not that there was one specific epiphany. [...] continually there was another insight added: 'oh we could also do this, oh we could also do that'”¹⁴⁸

Contestations and relations between actors

Contestations are debates among SIE-field-actors and/ or other field-actors over SIE-field structures and processes. Both contestations and relations provide an indication of how institutionalised (or not) the SIE-field is (e.g. are there formal networks).

There are a number of observations to be made on the relations between actors:

- In both anti-gas extraction framings, local SIE-initiatives do team up with national SIE-field actors (e.g. GBB and Milieudefensie) in informal and fruitful collaborations. Local municipalities and the provinces are also (eventually in the case of anti-fracking) supporting the anti-gas framings.
- Anti-Fracking: Water companies were also actively protesting fracking (in the beginning focused on stricter rules and regulations, later on more towards anti-fracking) but they do not seem to have had close relations with the Shalegasfree groups, but rather co-existed.
- The divestment framing: this movement is organised in a decentral way and started with activities from different unconnected individuals. FossilVrij NL became a coordinating organisation within this movement and is loosely connected to the broader Dutch climate movement – often because individuals that are active within this movement are also active in other climate activities.

Regarding contestations with the field, we observe the following:

- **Divestment:** Should investors completely divest and thus take out all their money from fossil fuel companies, or should people start invest in fossil fuel companies so as to ‘take over’ the company via shareholder meetings and votings. The former is the

¹⁴⁸ Dutch original: “Ja, het is ook redelijk geleidelijk gegaan. Ja, er werd altijd gezegd ‘dat kan niet’, die gaswinning omlaag, want we hebben geen alternatieven. Ja, en het bleek dat die alternatieven dat toch wel waren. Dat waren heel vaak hele technische discussies over de kwaliteit van het gas [...]. Maar dat had ook veel te maken met exports. Nederland had super lange termijn contracten met het buitenland om gas te leveren [...] en van die contracten werd altijd gezegd ‘die kunnen we niet openbreken’, maar dat bleek dan toch te kunnen. Er bleek toch veel meer gas te importeren te zijn [...]. Dus dat is eigenlijk nog heel geleidelijk gegaan. Niet dat er een specifieke ingeving was. [...] steeds een inzicht bijkwam van ‘oh maar we kunnen ook nog dit doen, oh we kunnen ook nog dat doen’.”

strategy of FossilVrij NL and the campaigns outlined, however other SIE-field actors such as Follow This! are engaging in ‘shareholder activism’ as a way to turn the tide. The latter is also the line of reasoning that actors such as the pension funds are following

- **Divestment:** Will the return on investment of investment portfolios suffer when investors divest or will it suffer from keeping the investments. (Plantinga and Scholtens 2020) argue they will not.

Especially for the divestment movement there are a number of interesting scholarly articles that are discussing and researching the claims and some of these contestations (especially (Braungardt, van den Bergh, and Dunlop 2019), but also e.g. (Hansen and Pollin 2018; Plantinga and Scholtens 2020; Rempel and Gupta 2020).

The contestations of this case are, among others:

- **Divestment:** What are the main priorities? This question refers to the emergence of new topics and possibly ensuing tensions on whether and how to incorporate these within the existing frames. Interviewee 7 points to the topic of ‘intersectionality’ as an example: Fossilvrij has had discussions on how to position itself: *“You have that, that some people are more committed to an inclusive fight for climate justice than others, who are more professional single issue campaign group. They focus more on climate alone, or climate first. That is one thing the climate movement is working on. You can say there are tensions there. But that is a normal work in progress, [...] Yes. ‘How can we deal with these new issues that have come to light for everyone’. Or ‘okay this is an issue now, how do we incorporate that into our work’. At Fossilvrij, we put a lot of effort into this and developed a DNA in which social justice is considered central.”*¹⁴⁹
- **Anti-Groningen gas:** Whose fight is it? This was a question that came back in the relation between the local activists in Groningen and the national NGO Milieudefensie, and was especially salient there since both groups followed their own agendas but collaborated against a shared enemy. An illustrative moment was recounted by Interviewee 5: *“I still remember very good one moment. We had organised a podium for an action in The Hague with a big banner that said ‘stop gas extraction’ or ‘together against gas’ I do not remember properly. And then our communication department had*

¹⁴⁹ Dutch original: *“Je hebt dat sommige mensen meer begaan zijn met een inclusieve strijd voor klimaatrechtvaardigheid dan anderen, die zijn meer professioneel single issue campagne groep. Die focussen meer op klimaat alleen, of klimaat first. Dat is wel een dingetje waar de klimaatbeweging mee bezig is. Daar zijn wel spanningen kan je zeggen. Maar dat is een normale work in proces, [...] Ja. ‘Hoe kunnen wij met die nieuwe problematiek die aan het licht zijn gekomen voor iedereen’. Of ‘oké dit is nu een issue, hoe incorporeren wij dat in ons werk’. Bij Fossilvrij zijn we daar flink mee aan de slag gegaan en een DNA ontwikkeld waarin social justice centraal beschouwen”*

printed a Milieudefensie logo on it. And I masked it at the spot with tape. Because people from Groningen with whom we had build a trustful relation said, don't do this, because if you brand it now then you will loose the support of the people from Groningen. Thus, we masked the logo to show: 'no, no, no this has nothing to do with Milieudefensie branding, this is just, we support the people from Groningen to get their voice heard"¹⁵⁰.

- **Anti-fracking: Tensions around financial resources** arose in Haaren, where at the very beginning of the developments two groups stood up to fight the shale gas developments. As put by Interviewee 3: "There were eventually two parties in Boxtel who, yes, fought against each other a bit. With one party, I worked together very well, the other party, yes, was not really ready for collaboration. And that was really a pity. Especially, when at a certain moment also some subsidy turned out to be available by the Groenewoud. This is a foundation here in the neighbourhood which is also busy with its environment. And both drillings should be within the territory of the GroeneWoud in this region. Thus, at a certain point in time they had made a subsidy available for the protest. And then, this second club in Boxtel claimed that they should in fact receive all the money. Thus this became a sort sausage thrown into a dogs cage leading to lots of barking. Eventually, we arranged a sort of distribution of the money, but that was very cumbersome."¹⁵¹

Shared contestation:

- **Strategies being employed by activists:** should they be radical or should they sit on the table? A put by Interviewee 5: "Do we have to talk to the enemy or do we have to throw bombs? I have to say that this discussion about methods was there in the beginning but also at the end, when everybody was fed up"¹⁵² This tension was felt within organisations, such as within the GBB with its 4000 members where some

¹⁵⁰ Dutch original: "Ik kan me nog heel goed herinneren een moment. We hadden een podium geregeld voor een actie in Den Haag met een groot spandoek waarop stond 'stop de gaswinning' of 'samen tegen gas', ik weet niet meer precies. En daar had onze communicatieafdeling een Milieudefensie logo op geprint. En ik heb ter plekke dat logo af staan plakken met plakband-tape. Omdat mensen uit Groningen met wie we echt een vertrouwensband hadden opgebouwd, die zeiden doe dat nou niet, want als je dat nu gaat branden dan verlies je de support van de Groningers. Dus we hebben dat logo weer staan afplakken om te laten zien: 'nee nee nee dit heeft niet met Milieudefensie of branding te maken, dit is gewoon, wij helpen de Groningers om hun stem te laten horen"

¹⁵¹ Dutch original: "Er zijn uiteindelijk wel twee partijen opgestaan in Boxtel die zichzelf een klein beetje ja hebben bevochten. Met een partij heb ik heel goed samengewerkt, de andere partij, ja die waren niet echt tot samenwerking bereid. En dat was heel, heel jammer. Vooral toen er op een gegeven moment ook wat subsidiegeld bleek beschikbaar te zijn door het Groenewoud. Dat is een stichting hier in de buurt die zich ook bezighoudt met zijn omgeving. En beide boringen zouden binnen hun territoria, binnen het Groene Woud van deze regio gebeuren. Dus die hadden op een moment subsidie beschikbaar gesteld voor het verzet. Nou en, die tweede club in Boxtel die claimde dat zij in feite al die subsidiegelden zouden moeten krijgen. Dus dit werd een soort worstje dat werd hier in de hondenkennel gegooid en toen werd er flink geblaft. Ja uiteindelijk hebben we wel een soort van verdeling afgesproken, maar dat was toen heel moeizaam"

¹⁵² Dutch original: "Moeten we praten met de vijand of moeten we bommen naar ze gooien? Ik moet zeggen dat de discussie over de methodes, die was er in het begin, maar zeker aan het eind"

would have liked them to be more radical and other to be more tame. And the tension also became apparent between groups, such as for example between Schokkend Groningen and GBB – where the former engaged in radical action (occupying gas infrastructure), the latter considered those as “counterproductive”¹⁵³ for the societal perception. A similar dynamic can be observed between Noordoostpolder Shalegasfree which was more leftish and radical and Tegengas, which was more pragmatic (Interviewee 2). Recognising the value of combining action and deliberation, GBB always emphasized that sitting at the table was an important way to reach your goals (Interviewee 6). Also, ABB FossielVrij (Interviewee 7) sees the added value of good combinations of these: *“There is a kind of axis between two poles. One is an antagonistic position and the other extreme is a collaborative position. One end therefore wants to collaborate more and the other end is less concerned with collaboration. So, there you see a difference. And another difference is that some groups are more concerned with expression, thus expressing their concerns. For example, XR is very much concerned with raising concerns. They express very much. But Fossielvrij is very much concerned with making very concrete of ‘what exactly is the problem with this institution and in terms of cooperation’ and ‘how can we bring about a change in a very concrete way’. Those differences in turn reinforce each other.”*¹⁵⁴

Policies and policy making

The SONNET team is interested in policies (policy strategies and instruments) that are enabling and impeding the SIE field framings against fossil fuel based energy pathways - and the relative role of the urban, regional, national and European governance level. This includes a critical assessment of how SIE actors and their interests are being considered in these policy-making processes and the resulting policies, as well as how these are potentially empowering SIE-actors.

¹⁵³ Dutch original: “*contraproductief*”

¹⁵⁴ Dutch original: “*Er is een soort as tussen twee polen. De een is een antagonistische opstelling en de andere uiterste is een collaboratieve opstelling. De ene uiteinde wil dus meer samenwerken en de andere uiteinde is minder bezig met samenwerken. Dus daar zie je een verschil. En een ander verschil is dat sommige groepen zijn meer bezig met expressie, dus het uiten van hun zorgen. Bijvoorbeeld XR is heel erg bezig met het uiten van zorgen. Die uiten heel erg. Maar fossiel vrij is juist heel erg bezig van heel concreet maken van ‘wat is precies het probleem met deze instelling en qua samenwerking’ en ‘hoe kunnen we heel concreet een verandering teweegbrengen’. Die verschillen versterken elkaar weer juist.”*

The analysis of the divestment framing did not bring to light specific public policy strategies or instruments that would enable or impede its activities. Reversing the analysis, (Braungardt, van den Bergh, and Dunlop 2019) cite a number of studies that show that the divestment movement had positive effects on the development of effective climate policies. There has not been any targeting of a specific public policy by the divestment framing. Interesting in this regard would be whether there have been any changes in the investment policies of local governments – since there are local action groups targeting specifically local governments. Beyond, rather than targeting national policy, FossilVrij NL has targeted the pension fund ABP and its investment policies – thus the internal policies of an organisation.

For both anti gas extraction framings, the most important laws and policies that were basically targeted by them were the mining law and to a certain extent the small field policy. In relation to anti-fracking, the mining act was changed to 1) transfer burden of proof by damage to the operator, instead of the victim 2) extend the ground of refusal to protection of the environment, safety or public health, and 3) to have a role for decentral governments in the decision making process related to the mining act. Important in the anti-fracking case were policy instruments such as the structure vision (structuurvisie) as well as strategic environmental assessments. In relation to the anti-Groningen gas case, there have been numerous policies and policy changes – these warrant their own specific policy analysis and are not covered in detail in this report. Important to mention is 1) the multi-level governance aspect – involving the affected municipalities, the province of Groningen as well as the Ministry and 2) the opaque emergence, adaptation and phasing out of governing institutions and organs.

Power and power relations (power to + power over + power with)

SONNET studies the power relations that enable or impede the SIE-field and vice versa. SONNET builds on Avelino (2017) in understanding power as the relational and structural (in)capacity of actors to mobilise resources and institutions to achieve a goal. SIEs can refer to the resources being mobilised and/or the goals being aspired (D1.2). SONNET distinguishes between ‘power to mobilise SIE-related resources and/or to achieve SIE-related goals (incl. (in)equality and in/exclusion), power over others in SIE-related processes (including dependency, oppression & exploitation), and power with other actors to achieve collective (SIE-related) goals’ (Wittmayer et al. 2020, 44)

Power to mobilise resources/achieve goals

- SIE-initiatives actors were knowledgeable about power dynamics, because of their backgrounds (e.g. GBB, Shalegasfree Netherlands, EUR Fossil Free). This gave them an advantage in how to grow their organizations, because they used their contacts to find allies in the right places, such as politicians or scientists, but also to strategize how to protest the developments around fossil fuels, for example by setting up dialogues and knowing when to walk away
- Mobilise the media: All SIE-initiatives were working closely with the media - both online and offline, and local, national and international.
- Mobilise knowledge: All SIE-initiatives had their own well-maintained websites documenting their history and activities; they also engage in doing their own research and thus in the creation of facts to fuel debates (e.g. ABP Dirty & Dangerous reports)
- Mobilise collaborations to fight for a collective goal despite also having different goals, for example GBB or Shalegasfree Haaren with Milieudefensie
- Mobilise financial resources: especially GBB, through membership fees, but also by getting paid for participating in consultation bodies (Interviewee 6); and on an ad-hoc basis Fossielvrij NL managed to ensure a big donation by the Postcode Lottery.
- Mobilise a feeling of empowerment: as outlined by Interviewee 4 “the whole idea of empowerment is also very strong in that of course: seeing a role for yourself. And picking up that, being able to pick it up and feeling a kind of supported in that and feeling part of a great movement”¹⁵⁵

Power over others in SEI-related processes:

- State over SIE-actors, manifesting through non-transparent decision making (e.g. behind closed doors), or through not taking account of solicited input for decisions (e.g. Sounding Board for the research into consequences of shale gas extraction), through setting up non-transparent processes and institutional circuits (e.g. anti-Groningen gas and the claim damage handling)
- State over municipalities, manifesting through laws and procedures that allow the state to ‘overrule’ municipalities, despite them declaring themselves shale gas free (Interviewee 1, Interviewee 3)

¹⁵⁵ Dutch original: “de hele gedachte van empowerment zit daar ook heel sterk in natuurlijk: van een rol voor jezelf zien. En dat oppakken, kunnen oppakken en daar een soort van ondersteund in voelen en onderdeel van een grote beweging voelen”

- Fossil-fuel companies over victims of earthquakes, manifesting through for example maneuvers to preempt damage payments, as put by Interviewee 5: “*And Shell just like Shell does, and they still do, knew how to avoid from all sides to be held fully responsible for all damage.*”¹⁵⁶; also manifesting through a feeling of powerlessness, as put by Interviewee 6: “*what we kept hearing was: well, parties such as Shell and the State, you will not come up against them anyway, so that is a lost cause*”¹⁵⁷
- Vested interest actors against SIE actors, through working ‘with’ rather than ‘against’ time. Interviewee 6 outlined that a first research into damage claims in Groningen started in 2006 and was delayed by 2,5 years. According to him: “*This is a well-known tactic of the people of the status quo, who want to keep the status quo. That is always delay, delay, delay of the change in status quo*”¹⁵⁸; also through ‘absorbing’ the countermoves such as ABP did. Interviewee 4 describes this as follows: “*It was a bit double how seriously ABP was going to take that, but ABP was just developing a new strategy. So it was a point in time to see how that was going to land there, let’s say. And in the end, they have a vague strategy with inclusion and not exclusion and those kinds of wonderful terms. Then you get a little more into the, yes, every year talking about the report, that kind of dynamic. ... And it's not that they don't listen to it at all, but they disarm it.*”¹⁵⁹

Power with other actors to achieve collective goals:

- Anti-Fracking: decentral governments that used their power to support SIE initiatives against the State, by symbolically declaring themselves shale gas free.
- Anti-Groningen gas: the collaboration between GBB and Milieudedefensie (as outlined above); the collaboration between local and provincial policy actors; collaboration also with non-human agents, as put by Interviewee 6: “so we had an ally in the earthquakes”¹⁶⁰

¹⁵⁶ Dutch original: “*En Shell heeft daar gewoon ja op zijn Shells, en dat doen ze nog steeds, aan alle kanten weten te voorkomen dat zij volledig worden gehouden voor alle schade.*”

¹⁵⁷ Dutch original: “*wat we steeds hoorden was van: Ach, partijen als Shell en de Staat, daar kom je toch niet tegenop, dus dat is verloren zaak*”

¹⁵⁸ Dutch original: “*Dat is een bekende tactiek van de mensen van de status quo, die de status quo willen behouden. Dat is altijd vertraging, vertraging, vertraging van de verandering in status quo*”

¹⁵⁹ Dutch original: “*Het was een beetje dubbel hoe serieus ABP dat ging nemen, maar ABP was net bezig om een nieuwe strategie te ontwikkelen. Dus het was wel een punt om te zien hoe dat daar ging landen, zeg maar. En uiteindelijk hebben ze een vage strategie met inclusie en geen exclusie en dat soort prachtige termen. Daarna kom je een beetje meer in de, ja, ieder jaar maar weer eens hebben over het rapport, zeg maar die dynamiek. [...] En het is niet dat ze er helemaal niet naar luisteren, Maar ze maken het wel onschadelijk.*”

¹⁶⁰ Dutch original: “*in de bevingen hadden wij dus bondgenoot*”

- Divestment: Support through prominent environmental organisations, such as Urgenda, especially in the beginning: not through working together, but through “*name dropping, [...] that does give some kind of approval to the existence of Fossilvrij*”¹⁶¹ as put by Interviewee 4. They could for example include a quote of Marjan Minnesma on their website.

Inter-field interactions

For this case of ‘framings against fossil fuel energy pathways’, there are some interesting observations on the interactions between the three main framings: anti-fracking, anti-Groningen gas, and divestment.

- Milieudefensie has been involved in both anti-fracking and anti-Groningen gas and related those more localised struggles to national debate on the necessity and utility of gas in the future energy mix.
- Especially the divestment framing is closely linked to a broader climate activism and also the broader Dutch climate movement. As reasoned by Interviewee 5: “*And the divestment campaign, I don't think it is necessarily very linked to it. Uhm, it had more to do with a kind of revival of climate activism around the climate summit in Paris. A number of climate marches were also organized in the Netherlands at that time. But that was all, I think, yes, that was all before Groningen played. Uh, so that led to the Paris climate summit and the resurgence of climate activism, making it easier to mobilise people for climate related issues, I think. But the campaign in Groningen is actually mainly based on people from Groningen, who were not concerned with the climate at all. Yes, they were very much people who resisted something that was done to them. Yes, we have always tried to make that link with climate, also with the shale gas campaign. The core of the resistance there were just people who got a derrick in their backyard and didn't want that. Yes, and we have, also as Milieudefensie, we have started supporting those groups, also with the idea of yes, but this is also about climate. So we brought those arguments in*

¹⁶¹ Dutch original: “*name dropping, [...] dat geeft wel een zekere soort van goedkeuring aan het bestaan van fossielvrij*”

there”¹⁶² Interviewee 4 also observed that individuals moved out of the NIMBY to connect to the broader climate activism: *“I do know that a number of people who have turned against shale gas from NIMBY have also continued in the climate movement in a broader sense.”*¹⁶³.

- There is also the suggestion, that anti-fracking paved the way for refuelling the anti-Groningen gas campaign. As put by Interviewee 5: *“Without that shale gas campaign, we might not have started the Groningen gas campaign. So, being a shale gas campaign was a much easier campaign in a lot of ways, because the opponent was a small cowboy company called Cuadrilla. It was about something that had not happened yet, where hardly any investment had been made. With which we had all the time to... There has always been the image of ‘oh the whole of the Netherlands is in opposition to shale gas’. But the bottom line was that there were ten, twenty people who could just scream very loudly and had the sympathy for it. But I think the biggest demonstration against shale gas has been a hundred people. But that was super effective. That has paved the way a bit to be able to do things in Groningen.”*¹⁶⁴

¹⁶² Dutch original: *“En de divestment campagne, ik denk niet dat die er per se heel erg aan gelinkt is. Uhm, die had meer te maken met een soort opleving van klimaat activisme rondom de klimaattop in Parijs. Er waren toen ook in Nederland een aantal klimaatmarsen georganiseerd. Maar dat was allemaal toch, volgens mij, ja, dat was allemaal voor dat Groningen speelde. Euh, dus dat heeft ertoe geleid, de klimaattop in Parijs en de opleving van het klimaat activisme, dat het makkelijker was om mensen te mobiliseren voor klimaat gerelateerde onderwerpen, denk ik. Maar de campagne in Groningen draait eigenlijk vooral op Groningers, die helemaal niet met het klimaat bezig waren. Ja, dat waren heel erg mensen die in verzet kwamen tegen iets wat ze werd aangedaan. Ja, wij hebben wel altijd geprobeerd om die link te leggen met klimaat, ook met de schaliegas campagne. De kern van het verzet daar waren gewoon mensen die een boortoren in hun achtertuin kregen en dat niet wilden. Ja, en wij hebben wel, ook als Milieudefensie, wij zijn die groepen gaan ondersteunen, ook met het idee van ja, maar dit gaat ook over klimaat. Dus we hebben daar die argumenten ingebracht”*

¹⁶³ Dutch original: *“Ik weet wel dat een aantal mensen die zich gekeerd heb tegen schaliegas vanuit NIMBY ook mee door zijn gegaan in de klimaat beweging in bredere zin”*

¹⁶⁴ Dutch original: *“Zonder die schaliegas campagne waren wij die Groningen gascampagne misschien niet gaan doen. Dus, die schaliegas campagne was, was in een hele hoop opzichten een veel makkelijker campagne, want de tegenstander was een klein cowboy bedrijfje, Cuadrilla. Het ging om iets wat nog niet gebeurd was, waar amper geïnvesteerd was. Waar we alle tijd mee hadden om... Er is altijd het beeld geweest van ‘oh heel Nederland is in verzet tegen schaliegas’. Maar puntje bij paaltje waren dat tien, twintig mensen die gewoon heel hard konden schreeuwen en wel de sympathie mee hadden. Maar de grootste demonstratie tegen schaliegas is denk ik honderd mensen geweest. Maar dat was wel super effectief. Dat heeft wel een beetje de weg vrijgemaakt om in Groningen ook dingen te kunnen doen.”*

6 Summary, synthesis and conclusions

6.1 How have the SIE and SIE-field emerged, developed and institutionalised over time?

6.1.1. What is 'socially innovative' about the SIE (including SIE-initiatives and/ or SIE-field-actors)? How and to what extent do which ideas, objects and/or actions demonstrate a change in social relations and new ways of doing, thinking and/or organising energy?

'Framings against fossil-fuel based energy pathways' has been identified as a type of SIE where 'conflicts' (rather than cooperation, exchange and competition) is a defining feature of social interactions. This SIE refers to configurations of novel ideas against fossil fuel energy pathways combined with actions such as protesting, campaigning, deliberating/lobbying and creative interventions using both established means (banners, bodies, sites) as well as more novel digital infrastructures (websites, social media, etc), which aim to change dominant (societal) discourses about existing energy pathways, influence policymaking and/ or 'stop' local fossil fuel production.

In general, there is nothing completely original about activism and protesting – including framings against fossil-fuel based pathways – especially the kind of activities engaged in. What can be considered socially innovative is the imaginary of new social relations that these framings are including and that the SIE-field actors are working towards. Take the divestment framing, this includes the imaginary of an energy system and a world without a fossil fuel industry; or the anti-Groningen gas framing, which includes the imaginary of a region without gas extraction and actors related to that.

To underline the innovativeness of such an imaginary, take the following example. Arriving at a stop of the gas extraction in Groningen was even unimaginable for GBB and Milieudefensie at the start of their activities – so their demands were oriented towards their assessment of what would constitute a high demand (e.g. a production cap of 30bcm/year). Overall, the anti-fossil fuel framings changed social relations at different levels – between individuals, between organisations and between the state and the community in question. A very concrete example – in the anti-Groningen gas framing, the government took on the responsibility for damage handling and thus intervened in the relation between citizens and the NAM and make it a relation between citizens and their government.

6.1.2. How has the SIE developed over time (and space)?

The following outlines the development of the SIE and the SIE-field over the three periods detailed in the historical account.

Phase 1: 2009-2013 Emergence of new anti-fossil fuel framings and initiatives: a period where framings against fossil-fuel surged in the Netherlands: newly emerging protest and framings against the fracking of shale gas in several locations in the Netherlands (2010), increased protest against gas extraction in the province of Groningen (after a severe earthquake in 2012) and newly emerging framings around fossil-fuel divestment (in 2013). During this first phase, actor constellations emerged locally at sites where shale gas resources were to be explored along with a frame focusing on safety and environmental damage. An alternative frame on safety emerged, next to the focus on damage of houses in actor constellations around anti-gas extraction from the Groningen field. Both these frames started in the localities where gas extraction was going to be or already took place. Finally, a frame combining climate change and financial investment was brought to the Netherlands and picked up by individuals and a leading NGO.

Phase 2: 2012-2017: National frames on energy transition and growth of movements: a period that started when the actor constellations consolidated and grew and when activities and frames of all three framings went beyond specific localities to reach a broader nation-wide public. This took place around 2012 for anti-fracking, when the campaign by Milieudefensie (a national NGO) took off, ShaleGasFree Netherlands was founded, activists in a different location (Noordoostpolder) started to organise and many municipalities and provinces declared themselves shale gas free. In 2014 for anti-Groningen gas, when a new governmental decision on gas extraction was taken, Milieudefensie got involved and the problems with gas extraction were more present across the Netherlands. The same year also for divestment, with the start of a national campaign targeting the ABP pension fund which acted nationwide. The nationalising of the activities and frames meant linking local frames such as environmental or physical damage or safety of the population with national frames such as the security of supply, the economic efficiency of gas extraction as well as the role of gas in the overall energy mix and in the transition to renewable energy. It thus pulled the claims out of the 'private' into a public sphere. The anti-Groningen gas frames started to move towards stopping rather than only reducing gas extraction and to include alternative regional development perspectives putting forth renewable energy as a topic. For the divestment movement it was about making the investment decisions of ABP matters of public interest by linking it with climate change – this was also part of a broader reorientation to focus next to financial also on non-financial ties between society and the fossil fuel industry.

Phase 3: 2015-2020 Regulatory successes and reoriented frames: a period when many of the initial and adapted claims of the SIE-initiatives became institutionalised and they reoriented their frames. For anti-fracking, regulatory success started in 2015, with the strategic environment assessment and an amendment that was filed by MPs to allow refusal of permits on environmental grounds. This quickly led to a change in the Mining Law that banned shale gas extraction in the Netherlands and to a dispersion of the field. For anti-Groningen gas, 2018 marked regulatory success when the Minister of Economic Affairs announced to reduce gas extraction in 2022 and to stop it by 2030 (later this was moved to 2022). This meant that GBB, one of the main SIE-initiatives started re-orienting towards diligent implementation of these new regulations while Milieudefensie started to campaign for stopping gas extraction also in other onshore smaller gas fields in the Netherlands. For divestment, successes had been booked with the campaign against pension fund ABP. They reoriented this campaign, on the one hand focusing on other pension funds and other kinds of investors, and on the other hand to implement their focus on financial and non-financial relations between the fossil fuel industry and society, by e.g. focusing on culture or research institutes.

6.1.3. What are the relevant SIE-field-actors and other field-actors within the SIE-field and what are their roles within the SIE-field? How have these changed over time?

There are numerous actors who work on ‘Framings against fossil fuel energy pathways’ (i.e. SIE-field actors) including NGOs, informal groups, local initiatives and residents that work locally, regionally, nationally but also internationally and aim to change societal debates about fossil fuel-based energy pathways. Also local and regional governments play an important role.

Opponents to Groningen gas include local associations (e.g. Groninger Bodem Beweging), foundations (e.g. Stichting WAG), more informal groups (e.g. Schokkend Groningen) as well as active individuals (e.g. upholding websites to inform) – all these are protesting against the damage and unsafety resulting from gas extraction induced earthquakes and eventually against gas extraction. They are supported by a national environmental NGO (Milieudefensie) that aims to reduce and end gas extraction from the Groningen field. These actors take up the roles of actively pushing for damage handling, safety measures, reduction and ending of gas extraction by engaging in different activities. Also, policy actors, such as the Province of Groningen, as well as the seven municipalities within the earthquake area, are engaging in those frames and are thus opposing gas extraction. The roles of these actors did not change too much throughout the development of the SIE-field. However, after reaching their goals of stopping gas extraction and a

public handling of damage claims, several actors are currently reorienting. This includes for example Milieudefensie, which now focuses on stopping also gas extraction from other gas fields in the Netherlands, or from GBB who indicated that with all the successes of the last years, their work is now changing towards monitoring the implementation of the new regulations for handling claims for damage compensation and the reinforcement of houses.

For **framings against fracking, the situation is similar. SIE-field actors** included local groups, either informal action groups (e.g. Schaliegasvrij Boxtel) or formalised as foundations (e.g. Schaliegasvrij Haaren). Other actors were a national foundation (Schaliegasvrij Nederland), regional environmental NGO's such as the Brabantse Milieufederatie and the national environmental NGO Milieudefensie. Importantly, SIE-field actors here also included other stakeholders, who feared detrimental consequences for their activities from shale gas exploration and extraction, these include a bank (Rabobank) or a water company (e.g. Brabant Water). The local press as well as national MPs, mainly a green-left politician also were relevant SIE-field actors.

Other field actors in the case of both anti-Groningen gas and anti-fracking included:

- the Ministry of Economic Affairs and Climate with an ambivalent role: supervising continued gas extraction and aiming to secure energy supply and adherence to international contracts on the one hand and setting climate targets, reducing and eventually stopping gas extraction from shale gas and from the Groningen field on the other hand;
- mining or exploration companies (such as NAM, Cuadrilla) impeded the development of the field by working against the framings since their main interest lies in the exploration and exploitation of (shale) gas fields;
- policy advisory bodies or semi-public institutes (e.g. SodM, KNMI, NCEA, Dutch Safety Board) who were enabling the development of the field to a certain extent especially through providing specialised knowledge and help broaden the government's framing;
- judges and courts (e.g. Council of State, local courts) mainly enabling the further development of the field through their rulings;
- the Dutch parliament also enabling the discussions around the different frames;
- broader climate movement (e.g. CodeRood) as well as individuals locally and nationally enabled the development of the field through taking part in protests, signing petitions, knitting for Groningen, etc.

For **divestment, SIE-field actors**, actively working on the framing are 'Fossilvrij NL' (as coordinating actor) and many informal local or national groups focusing on specific domains or target groups (e.g. Fossilvrij EUR, Fossilvrij Culture). Fossilvrij NL has always been in close connection with the international organisation 350.org. At the start of the movement, environmental organisations had played an initiating role and they have been supportive throughout (e.g. Urgenda, BothEnds, CodeRood, Stichting Morgen, Greenpeace). **Other field actors** include pension funds (such as the ABP), local councils, actors from the cultural sector such as museums, or universities – all profiting one way or the other from financial, sponsorship or other kind of relations with the fossil-fuel industry – many of these are having an ambivalent role: on the one hand supporting climate change measures while on the other investing in or being influenced in different ways by the fossil-fuel industry.

6.1.4. What are relevant activities, aims/goals and narratives that have been developed and manifested by SIE-field-actors and/ or other field-actors within the SIE-field over time?

SIE-field actors have developed many activities over time and continued to develop their narratives, both to reach their aims. In a nutshell, the **aims** of SIE-field actors were the following:

- Anti-fracking: to stop the exploration of shale gas,
- Anti-Groningen gas: to receive compensation for damage by earthquakes and to have houses reinforced to live safer in an earthquake area with eventually a reduction and stop of the extraction of natural gas from the Groningen field,
- Divestment: a stop of investments in the fossil-fuel industry.

These aims are closely linked to the **narratives** of the SIE-field actors, and thus to the frames they used. The framings against gas extraction in Groningen and exploration of shale gas, both start from local concerns. Especially the frames around anti-fracking have been studied intensively by scholars (Cuppen et al. 2019; Dignum et al. 2016; Metze 2013a, 2013b, 2017, 2018a, 2018b). The frames used at the start of the anti-fracking campaigns focused on safety and environment and changed towards utility and necessity in the broader debate about the Dutch energy mix. Framings around anti-Groningen gas and divestment have not been studied in-depth by the existing literature.

Based on this case study work, we can identify a number of changes in both framings. The frames used around 2009 against gas extraction in Groningen focused on damages on houses and the need to have the repairs compensated for. After the Earthquake in Huizinge in 2012, the frame

was broadened to include a concern for the people's safety and thus the need for reinforcement of houses. Around the arrival of Milieudefensie in 2014 and reinforced by that, the call for reducing gas extraction and subsequently the frame to stop gas extraction became more widely shared. The latter came with calls to find narratives of what the region could look like without gas extraction. The divestment framings shifted in terms of target group and in terms of target 'object'. While university groups were established modelling the US and UK movement, individuals simultaneously started with addressing the biggest pension fund of the Netherlands. Next to targeting such quantitative financial relations, they also reframed towards including more qualitative social ties such as through sponsoring, education or advertising and started employing more activities towards addressing those ties.

The actors engaged in a whole range of activities including: demonstrations, torchlight processions, action camps, petitions; deliberating and thinking along with policy actors, also lobbying; ongoing media work including websites, own newspapers, social media as well as creative interventions including art, theatre, knitting - to name the basics.

6.1.5. What types of interactions/ relations exist between SIE-field-actors and/ or other field-actors? What types of informal and formal alliances, networks, collaborations have existed (and possibly still do)?

Informal networking between different individuals (e.g. through the activities of the loosely organised Dutch climate movement), with politicians, and other stakeholders, be those environmental organisations, municipalities or water companies, is an important part of the work of SIE-initiatives. There are however not many signs of formal networking between SIE-field actors and/or other field-actors. Importantly, with the focus on framings, one could consider discourse coalitions as an important form of alliance - one that is not formalized, often not explicit and people do not necessarily know each other. Some observations on interactions and relations are shared below.

In both **anti-gas extraction framings**, local SIE-initiatives do team up with national SIE-field actors (e.g. GBB and Milieudefensie) in informal and fruitful collaborations. The **anti-Groningen gas** framing shows different kinds of interaction between SIE-initiatives - collaboration e.g. between Milieudefensie and GBB in organising torchlight processions and in filing court cases against the state; conflict: e.g. between GBB and Schokkend Groningen in terms of the kind of activities being engaged in. Interesting to mention here is that they had different overall goals (energy transition and lowering emissions vs. safety and reducing damage) but could find each other in a shared means - stopping gas extraction. In Groningen, also more formalised

consultative bodies were established that brought together all stakeholders from the region to discuss issues of damage handling, reinforcement of houses, gas extraction and the future of Groningen – e.g. the dialogue platform or the societal steering committee.

The **anti-fracking framing** also shows competition about resources between different initiatives, especially when activities just started, based on an example of two action groups in Boxtel. However, interviewees indicated that networking, especially in the starting days of Schaliegasvrij Haaren was a very important activity that the SIE-field actor engaged in. This included reaching out to the local press, to national environmental organisations as well as to politicians and all those that could have a stake in not exploring shale gas in the specific localities and in the Netherlands more broadly. Regarding anti-fracking, at least some 220 municipalities and 9 provinces declared themselves ‘shale gas free’, thereby publicly becoming part of a broader alliance. The organisation Schaliegasvrij Nederland is a formalisation of the collaborations between a number of actors, including Schaliegasvrij Haaren, and the action group Schaliegasvrij Boxtel, Milieudefensie as well as the anti-coal gas fracking action group in Gelderland. The latter link also shows that informal collaboration between different locations as well as across different types of fracking (coalgas vs. shalegas) happened.

The individuals and also the SIE-initiatives active in the **divestment framing** are organised in a decentral way, with different groups being connected through a similar name and a website but rather autonomous in their activities. FossilVrij NL is a coordinating organisation and is broadly networked as part of the broader Dutch climate movement that connects individuals across different organisations and activity foci – often because individuals who are active within this movement are also active in other climate activities.

The relations with other field actors, especially those opposing the suggested frames is characterised by conflict in relation to those frames – such as between Schaliegas Haaren or GBB and the Ministry of Economic Affairs, or between ABP FossilVrij and ABP. However, this does not mean that they only engage in conflictual activities, rather and as outlined by GBB it is about balancing more activist and more deliberative activities in relating to other SIE-field actors.

6.1.6. How can the interactions/ relations between SIE-field-actors and/ or other field-actors be characterised (e.g., cooperation, exchange, competition and conflict)? How have they changed over time?

See answer to question 6.1.5.

6.1.7. How/ to what extent do narratives and activities by SIE-field-actors and other field-actors refer to power issues and include ambitions to improve them?

The SIE-field actors aim at challenging existing power relations (see also 6.3.6) – they are born out of the idea of not wanting to have certain actors have power over their immediate living circumstances – be that the NAM as gas extraction company, Cuadrilla exploring shale gas or the fossil-fuel industry infiltrating everyday lives through pensions, advertising or educational activities. These actors certainly claim the power of being ‘morally right’. Their activities are focused on showcasing their power through showcasing the mass of people that is supporting them; e.g. through petitions, demonstrations or through choosing the legal form of association that is based on membership. They are also focused on reducing the power of the ‘other’ on their lives, e.g. through court cases or lobbying; or on undermining the societal status of the fossil-fuel industry and the power that comes with it ; e.g. through gaining societal support for their ideas or revoking the social licence to operate as outlined by the divestment narrative. References are made to power issues specifically in terms of the power of companies, such as the NAM, who stretch time or play on time using the massive financial resources that they have.

6.1.8. What have been (shared) narratives, activities, knowledge, learnt lessons, etc. between alliances/networks/collaborations of SIE-field-actors and/ or other field-actors? How have they been reproduced, adopted and replicated in the SIE-field? To which extent have they been legitimised and/ or contested by several actors within the SIE-field? Have there been any key changes over time?

The shared narrative of the different groups (e.g. Fossil Free Education, Fossil Free EUR) engaged in the **divestment framing** concerns the idea that investment in the fossil fuel industry is morally wrong and financially untenable. A proposed alternative is to invest in renewable energy. They have extended this framing towards encompassing not only financial but all other ties that the fossil fuel industry has with Dutch society. The framing is being reproduced through the different activities that the groups are engaging in and which put it recurrently on the societal agenda. These framings are contested by the fossil fuel industry but also by the institutional investors and those organisations targeted by the campaigns. While the divestment narrative gained ground in terms of the moral claim regarding climate change, it struggles with the financial claims, which are much more contested. Counter arguments are that firstly, investment portfolio’s will not so much suffer from investing but from divesting since risks can be less spread, and secondly, by divesting, the investors would lose their influence on those companies and thus miss out on the opportunity to help them act in a morally right way.

The **anti-Groningen gas framing** shows that SIE-field- actors do not necessarily need to share all elements of their narratives – while Milieudefensie focused on gas reduction and eventually stopping gas extraction, GBB focused in first instance on damage repair and safety and only in second instance on gas reduction. Those frames were legitimised over time through court rulings by the Council of State, but also through advisory reports of several governmental advisory bodies (such as the SodM, KNMI, Dutch Safety Board). Other SIE-field actors such as municipalities and the Province of Groningen also put forth a frame that focused on creating a future perspective for Groningen that was independent from gas extraction and emphasizes the possibilities of renewable energies. These frames were countered by other field actors pointing to issues of security of supply of energy and the need to use natural gas as a transition fuel in the transition towards an energy system based on renewable energy sources. Eventually, research into substitution for natural gas from the Groningen field showed that indeed security of supply could be sustained without gas from the Groningen field.

The frames around **anti-fracking** in the Netherlands have been studied intensively by scholars (Cuppen et al. 2019; Dignum et al. 2016; Metze 2013a, 2013b, 2017, 2018a, 2018b). The frames used at the start of the anti-fracking campaigns focused on the unclear safety and environment issues in relation to shale gas exploration and extraction, eventually the frame was picked up by the government to the extent that it led to the commissioning of research into possible consequences and to a letting go of their initial frame considering shale gas extraction as ‘business as usual’. Frames that emerged from there focused on economic efficiency, the role of shale gas in the Dutch energy mix (considered as ‘game changer’ or as ‘drop in the ocean’) and the role in the transition to renewable energy (gas as ‘transition fuel’ or as ‘transition delayer’) (Metze 2018b).

6.1.9. Reflections on the main research question (base on answering the minor ones)

What might have become clear through the way that these minor research questions have been answered is that it is difficult to set boundaries for this empirical SIE-field: rather than one field including different framings against fossil-fuel industry, it seems that the three framings that we have been studying are fields on their own and that it could make sense to write them up in their own right. Especially the divestment framing differs, in terms of dynamics but also in terms of not being rooted in a certain locale. But also the difference between anti-Groningen gas with its long history of gas extraction and anti-fracking, which has never led to a ‘hole in the ground’ has consequences for the storyline.

6.2 How do SIE-field-actors and other field-actor interact with the ‘outside’ institutional environment and thereby co-shape the SIE-field over time?

6.2.1. Which institutions (regulative, normative, cultural-cognitive) within the ‘outside’ institutional environment have shaped (including enabled/ impeded) SIEs and its SIE-fields (and how)?

Without doubt, government and gas extraction industry have had a great influence on the development of this field: its actors, their activities and frames. Extracting gas to secure Dutch energy supply was business as usual and as such has actors with vested interests in keeping the status quo. Laws and policies, societal expectations and common beliefs were tied to keeping this system in place. The increasingly stronger acknowledgement of climate change and its consequences in public discourse but also in policy agreements, such as for example the Paris Climate Conference and its national equivalent have been supporting framings against fossil-fuel energy pathways. However, powerful companies such as Shell, co-owner of NAM, have been going far to delay responses or more to not being held accountable for the societal and environmental consequences of their commercial activities.

The SONNET team is interested in building an understanding of how dominant institutions within the ‘outside’ institutional environment influence the emergence and development of social innovation in energy – framings against anti-fossil fuel energy pathways. Institutions are made up of regulative, normative and cultural-cognitive elements. They are tacitly or explicitly agreed upon rules constraining or enabling activities of actors that provide stability and meaning to social life. These can be: 1) Regulative institutions: laws, rules, standards, policies, 2) Normative institutions: norms and value systems, and 3) Cultural-cognitive institutions: shared conceptions of reality, binding expectations, and common beliefs.

Regulative institutions, including laws, rules, standards, or policies have influenced the emergence of at least the framings against gas extraction discussed here – since these were directed against specific regulative institutions. Anti-fracking frames were directed against ‘handling’ of shale gas extraction like any other type of gas extraction and thus as falling under the current Mining Law and the ‘Small-field policy’. Anti-Groningen gas frames in the beginning were directed against standard practice of having to handle damage claims with a private party (NAM) rather than dealing with damage and value reduction as a public cause.

Two more generally embedded ways of the Dutch government to deal with the framings and protests are firstly, the reflex to set up consultative bodies in case there are societal disagreements – often however, such bodies do not have special power or responsibilities; and secondly, the reflex to have more studies and research being done – both of which have surely slowed down the developments. Throughout the years, also the rulings of the Council of State for example have shaped the anti-Groningen gas extraction field in that it accelerated the developments towards not only reducing gas extraction but also bringing it to a halt.

Normative institutions, including norms and value systems have also had their influence. These institutions are key for actors of the divestment framing, who have been referred to as ‘norm entrepreneurs’ (Braungardt, van den Bergh, and Dunlop 2019): they question both moral norms and financial norms and try to change them. Their activities and frames are directed against the value system underlying financial investment in the fossil fuel industry. The norm – that goes beyond the SIE field – was to consider such investments as profitable now and in the future, and as spreading the financial risks within investment portfolios. Policy agreements such as the Paris Climate Agreement and the norms these establish enabled the development, since for example they allow linking climate change policies to decisions on financial investments for the divestment framing.

Cultural-cognitive institutions, including shared conceptions of reality, binding expectations, common beliefs, were for example shaping the development of the anti-Groningen gas extraction. The shared national belief that gas extraction from Groningen cannot be stopped was so strong, that even SIE-field actors did not dare to challenge it at the start. The rapid change of this shared belief in different parts of society helped to accelerate the stop of the gas extraction.

6.2.2. What are the key events, external shocks, trends and inter-field interactions that enable/ impede SIEs and its SIE-fields (now and in the past)?

Key enablers of the anti-gas extraction framings were **environmental shocks** in the form of earthquakes. For anti-Groningen gas these were specifically an earthquake in 2006 leading to a group of people organising and later founding the GBB, and one in 2012 in Huizinge drawing public attention to Groningen and putting public safety on the agenda – thus leading to a change in frame. While these bigger earthquakes were symbolic, they are but two examples of a long history of gas induced ground movement in Groningen. This ongoing insecurity locally did contribute to a strengthening of the anti-Groningen gas framing. For the anti-fracking framing, earthquakes in the UK (Blackpool) fuelled the public debate and were taken as one of the

arguments showing that shale gas fracking might not be so much about 'business as usual' as the government pretended. Also, the 2012 Huizinge earthquake did support the Shalegasfree initiatives in their framing of gas extraction being connected to concerns of environment and public safety.

Key policy events for enabling anti-fracking were the first moratorium in 2011 – since it stopped the possibility to continue the exploration for shale gas, and a governmental decision in 2018, which banned the possibility of shale gas exploration in the Netherlands. Key policy events for enabling anti-Groningen gas included the first governmental decision announcing a reduction in gas extraction in 2014 – and thus signposting the possibility for reduction; followed by a first Council of State decision overthrowing the governmental gas extraction plans for the 2015/2016 period asking for further limitation of gas reduction – signposting that the governments plan could indeed be challenged; and then two governmental decision in 2018, firstly to make damage handling a public affair (and thus providing citizens with a public procedure rather than every citizen having to address the NAM as a private company), and secondly, to end gas extraction in 2030. Especially the anti-Groningen gas framing knows a complex institutional field with many layers of policy and the founding and demise of organisations responsible for handling claims regarding damage and/or reinforcement of houses – this field with supposedly overlapping and unclear mandates did impede rapid changes but fuelled the resistance by those concerned.

Key **societal trends** include an increased importance being accorded to alternatives to fossil-fuel based energy production. This is fuelled by an increasing public realisation of the threats from climate change which culminated in 2015 in the Paris Climate Agreement and the Dutch counterpart, the Climate Agreement of 2019. The event in Paris was especially important in linking up Dutch climate activists who are since connected via facebook and through a yearly training camp. One of the resulting groups, Code Rood, then held actions in Groningen in 2018. For the divestment framing another key enabler influencing public opinion was the international documentary 'Gasland' with its vivid imaginaries of burning taps – next to a Dutch documentary on the movement.

6.2.3. How (if so) have the SIEs and their SIE-fields and 'outside' institutional environment been shaped by these events, external shocks, trends and inter-field interactions (now and in the past)?

See section 6.2.2 for an overview of the events, shocks, trends and inter-field interactions and the way these have been enabling and/or impeding the SIEs and their SIE-fields.

6.2.4. What have been the most important alliances/networks/collaborations SIE-field-actors and/ or other field-actors that emerged from these events, shocks, trends, and inter-field interactions (when, how and for what reasons)?

As has partly been outlined under 6.2.2., the following SIE-field actors emerged in relation to key events or shocks:

- The preparations towards and the aftermath of the Paris Climate Conference has led to a surge of climate activism in the Netherlands, and it was also during this time that many individuals met one another marking the start of a more active climate movement
- GBB was officially founded in 2009. It arose from a Sounding Board that was established in 2006 as a reaction to the increasing earthquakes and specifically, the earthquake of Westeremden on the 8th of August. The latter scored 3.5 on the Richter scale and was the heaviest until then. The Sounding Board was an initiative by the Stichting Dorpsbelangen Middelstum (SDM) and was established November 2006 after discussions with the province and municipality of Loppersum to research the consequences of natural gas extraction. After a while, the citizens involved in the Sounding Board became dissatisfied with the advancement and conclusions of the research and decided to unite themselves as what is now the Groninger Bodem Beweging, which is registered as an association.
- When Minister of Economic Affairs Kamp visited the Town hall of Loppersum in Groningen to present this governmental decision, 'Gas extraction in Groningen' from 2014, he was welcomed by a big group of protesters. This arose interest by activists at Milieudefensie and they started their involvement that very day.

Especially in the anti-Groningen gas framing, many governmental plans led to the formation but also demise of different organisations being charged with the handling of damage claims or claims for the reinforcement of houses. The case study in this regard only kept record of those that are relevant for the overall storyline – a more in-depth analysis of this web of actors could be illuminating. To mention one example: a dialogue platform was established in March 2014 with the goal to involve all concerned stakeholders such as the Ministry of Economic Affairs, NAM, the Province as well as societal organisations such as the GBB in working out the government decisions of 2014. Just about a year later, in June 2015 the National Coordinator Groningen was established (under the umbrella of which the institutional actors collaborated) and in January 2016, a societal steering committee involving inhabitants and societal organisations in all matters relating to damage, reinforcement and perspective – leading to a discontinuation of the dialogue platform which had become obsolete by then.

6.2.5. How have the SIE-fields co-evolved with the policy context (if so) (and what was the relative importance of the urban, regional, national and European level)?

The SONNET team is interested in policies (policy strategies and instruments) that are enabling and impeding the SIE field and the relative role of the urban, regional, national and European governance level.

The analysis of the divestment framing did not bring to light specific public policy strategies or instruments that would enable or impede its activities. Reversing the analysis, (Braungardt, van den Bergh, and Dunlop 2019) cite a number of studies that show that the divestment movement had positive effects on the development of effective climate policies. There has not been any targeting of a specific public policy by the divestment framing. Interesting in this regard would be whether there have been any changes in the investment policies of local governments – since there are local action groups targeting specifically local governments. Beyond, rather than targeting national policy, FossilVrij NL has targeted the pension fund ABP and its investment policies – thus the internal policies of an organisation.

For both anti gas extraction framings, the policy context has been very significant for their development. Rather than providing a bullet list that would fall short, we refer to the answer to 6.2.2. for an overview of the most important policies, while here we focus on those laws and policies that were targeted by the SIE-field actors: the mining law and to a certain extent the small field policy. In relation to anti-fracking, the mining act was changed to 1) transfer burden of proof by damage to the operator, instead of the victim 2) extend the ground of refusal to protection of the environment, safety or public health, and 3) to have a role for decentral governments in the decision making process related to the mining act. Important in the anti-fracking case were policy instruments such as the structure vision (structuurvisie) as well as strategic environmental assessments. In relation to the anti-Groningen gas case, there have been numerous policies and policy changes – these warrant their own specific policy analysis and are not covered in detail in this report. Important to mention is 1) the multi-level governance aspect – involving the affected municipalities, the province of Groningen as well as the Ministry and 2) the opaque emergence, adaptation and phasing out of governing institutions and organs.

6.3.6 How are which power relations (such as inequality, exclusion, oppression, exploitation, injustice) being transformed and/ or reproduced by the SIE-phenomenon under study? (and vice versa – how are SIEs enabled and impeded by power relations?)

The main power relations being addressed seemed to be the one between society and fossil-fuel industry, where the latter is considered to exploit natural resources (natural gas fields in the Netherlands, but also fossil fuels anywhere) for financial gain at the expense of safe living circumstances for society now (as is the case in Groningen) and in the future (when climate change becomes more visible). The activities of SIE-field-actors of the anti-gas extraction framings are addressing the state as a mediator between the interest of economic actors and its citizenry – and thus in an attempt to address the injustice arising from there. The strong ties between the government and the fossil-fuel industry, with the government also being a financial beneficiary of gas extraction did impede the SIE and its chances for success. It seems that it was only when alternatives for the industry had been found (getting engaged in importing gas, converting gas), when the government financially supported the payment of damage claims to a considerable extent and when gas extraction from the Groningen field became less financially attractive due to international gas prices but also due rising costs for the reinforcement of houses that there was more space to react to the demands by citizens for reduction and stop of gas extraction. Some additional observations:

- Incumbent actors have financial resources at their disposal, which buys them time and allows them to delay and to soften potentially painful decisions regarding or consequences for their operational model. Exemplary are the lawsuits of citizens of Groningen against the NAM.
- Knowledge and framing are important sources of authority and power for all actors involved. Exemplary are the negotiations about the boundaries of the research into the effects of shale gas extraction.

In terms of power dynamics, SONNET also distinguishes between ‘power to mobilise SIE-related resources and/or to achieve SIE-related goals (incl. (in)equality and in/exclusion), power over others in SIE-related processes (including dependency, oppression & exploitation), and power with other actors to achieve collective (SIE-related) goals’ (Wittmayer et al. 2020, 44). More on these can be found in the textbox on ‘Power and power relations (power to + power over + power with)’.

6.3.7. Reflections on the main research question (base on answering the minor ones)

No additional reflections

6.3 What are the enabling and impeding factors for the SIE-field-actors and other field actors to conduct institutional work and change the ‘outside’ institutional environment?

6.3.1. How, why, and where do SIE-field-actors and/ or other field-actors conduct activities linked to creating, maintaining and transforming institutions?

Institutional work refers to the activities of actors that aim to create, maintain and disrupt institutions (i.e.: regulative, normative and/ or cultural-cognitive). Such institutional work, specifically the practices of institutional work is what SONNET is interested in, the why, how, when, by whom and where of these practices, and what influences them. In the following, we outline a number of examples of institutional work within the field of ‘framings against fossil fuel energy pathways’. The practices that the SIE-field actors engaged in to challenge and disrupt existing institutions were manifold:

- organising torchlight processions, demonstrations or action camps, e.g., Milieudefensie organised anti-gas extraction demonstrations in The Hague where the parliament has its seat, or Code Rood organised an action camp in Groningen
- organising (social) media campaigns, creating own media outlets, issuing press releases; e.g. the GBB issued their own quarterly newspaper that was spread in the affected communities; all three SIE-initiatives (GBB, Fossilvrij NL, Shalegasfree Netherlands) had a website that documented all their activities over years
- lobbying with local, provincial and national politicians; e.g. with MPs from the green-left party in the case of shale gas
- issuing research reports; e.g. the four research reports about the investment of pension fund ABP in the fossil fuel industry or the research into the relations between the Erasmus University with that same industry

- launching petitions; e.g. the online petitions asking ABP to stop investing in the fossil industry, and the government to stop gas extraction in Groningen
- lobbying and taking part in official deliberation structures; e.g. GBB and its participation in the societal steering committee or the dialogue platform (to name two out of many), or Shalegasfree Netherlands and its participation in the Sounding Board of the research into the consequences of shale gas extraction
- using art (plays, caricature and others); e.g. the play of Fossil Free Culture in the Van Gogh Museum, the use of caricature in the GBB newspaper and blogs

Through these practices, they tried to challenge and disrupt several institutions.

- Specifically cultural-cognitive institutions, such as general public discourse and existing dominant frames regarding fossil fuels. Examples include the creation of frames against shale gas extraction, the transformation of existing frames against gas extraction as necessary for securing energy supply, towards reducing and stopping gas extraction in the Groningen field, the transformation of frames from seeing gas extraction as business as usual towards seeing it as source for damage and safety concerns including compensation of damage and reinforcement of houses, and the creation of a frame to consider investments as a tool for climate activism.
- These practices were also meant to challenge and disrupt regulative institutions, and the processes towards arriving at these, such as policy making and law amendments. Examples include working towards creating and ‘transforming’ the investment policies of ABP with regards to where they will invest; or transforming laws such as the mining law, which regulates natural gas exploration and extraction.
- Finally, also, normative institutions as in norms and value systems are being targeted. This includes challenging existing and creating new norms, such as the divestment framing challenging the perception that investments are neutral and that “*your investments do not have ethical consequences*” (Interviewee 4). The Dutch National Bank, a norm providing organization, started acknowledging the carbon bubble argument as a risk for investments. Anti-Groningen gas challenged the norm that gas extraction (and its consequences) are handled as a private matter and worked on transforming it into a public matter.

Overall, SIE-field actors, including NGO’s, foundations, associations, action groups were involved in creating and transforming institutions that were maintained by other field actors. They can be

said to specifically focus on cultural-cognitive institutions as well as normative institutions, to arrive at regulatory changes that then inscribe new frames and norms in legal practice. The work is framed in relation to the broader good and to the benefit of a broader group of people; e.g. the citizens of the earthquake area (GEB) and the potential fracking sites (Shalegasfree Netherlands), the world population that will benefit from less CO₂ emissions (Milieudefensie, FossilVrij NL). The clear antagonist of this work are actors who benefit from fossil-fuel exploration, extraction and distribution – this includes in first instance companies engaged in these activities (i.e. fossil-fuel industry) but also the Dutch government, who directly financially profits from gas extraction and indirectly through taxes. However, also the Dutch citizenry is a stakeholder here, since they are interested in being supplied with energy.

The change of institutions did happen gradually for the anti-Groningen gas framing. As put by Interviewee 5 *“it all went fairly gradually. Yes, they said always ‘it is not possible’, to reduce gas extraction, because we do not have alternatives. Yes, and then it turns out that there are. That were a lot of, often very technical, discussions about the quality of the gas [...]. But it also had a lot to do with exports. The Netherlands had long term contracts with other countries to supply gas [...] and about these contracts, they always said that these ‘cannot be broken open’, but it turned out that they could. It turned out that more gas could be imported [...] Thus, that all went very gradually. Not that there was one specific epiphany. [...] continually there was another insight added: ‘oh we could also do this, oh we could also do that’”*¹⁶⁵

6.3.2. *Who is involved in conducting institutional work (and who is not, and why not)? Which actors benefit from this work (or not)?*

This question has been answered under 6.3.1.

¹⁶⁵ Dutch original: *“Ja, het is ook redelijk geleidelijk gegaan. Ja, er werd altijd gezegd ‘dat kan niet’, die gaswinning omlaag, want we hebben geen alternatieven. Ja, en het bleek dat die alternatieven dat toch wel waren. Dat waren heel vaak hele technische discussies over de kwaliteit van het gas [...]. Maar dat had ook veel te maken met exports. Nederland had super lange termijn contracten met het buitenland om gas te leveren [...] en van die contracten werd altijd gezegd ‘die kunnen we niet openbreken’, maar dat bleek dan toch te kunnen. Er bleek toch veel meer gas te importeren te zijn [...]. Dus dat is eigenlijk nog heel geleidelijk gegaan. Niet dat er een specifieke ingeving was. [...] steeds een inzicht bijkwam van ‘oh maar we kunnen ook nog dit doen, oh we kunnen ook nog dat doen’.”*

6.3.3. *What have been the most important activities linked to creating, maintaining and transforming institutions?
Outline these activities through describing 2-4 examples.*

In the following, we provide two examples of institutional work.

Example 1: Judicial review of gas extraction plans – transforming regulatory institution

Outline activities: In 2015, 40 parties including GBB and Milieudedefensie had objected to the gas extraction plans of the Ministry of Economic Affairs for 2015/2016 and had filed applications for judicial review. The Council of State ruled that gas extraction for said period had to be limited to 27bcm and therewith set aside the initial plans of the government (Raad van State website¹⁶⁶). It reasoned that the plan of the Minister was integer and based on the studies into seismic threats that were at his availability. However, it also reasoned that considering those studies, which state that lowering gas extraction means lowering seismic risk, the Minister needed to better explain why he still allowed extraction of 33 bcm (the baseline for a very cold year, rather than an average year). The Minister needed to make clearer that he had taken all necessary precautions in weighing security of supply and safety of inhabitants. Through objecting the gas extraction plans and filing a judicial review, and by basing themselves on existing studies and results, the objecting parties transformed the policy plans while reinforcing (or maintaining) those results and the link between gas extraction and seismic activity.

Forms activities take: Taking the overview by (Phillips and Lawrence 2012), these activities might be closest to ‘practice work’, understood as ‘efforts to affect the recognition and acceptance of sets of routines, rather than their simply engaging in those routines’

Enabling/impeding factors: This institutional work was enabled by the collaboration between different organisations with different access to expertise and financial resources. In addition, the availability of research results that were recognised as legitimate and made the link between gas extraction and seismic activity was supportive. In that sense, also the ongoing actual ground movements and earthquakes worked in favour.

Intended/unintended consequences: This instance of institutional work led to a ruling by the Court of State that overthrew the gas extraction plans for the gas year 2015/2016 of the Minister of Economic Affairs. It also provided a signal to the SIE-field that the studies of a number of (semi-)public institutions such as the KNMI, SodM and the Dutch Safety Board were taken serious and that the government could be held accountable in relation to the insights from these studies. On

¹⁶⁶ See <https://www.raadvanstate.nl/@8695/gaswinning-groningen/> (accessed March 2021)

the side of the SIE-field actors, this constituted then also the first of a series of objections that were filed against all following draft gas plans that the Ministry of Economic Affairs presented (Interviewee 6). Also the Ministry of Economic Affairs understood the signal and for the gas year 2016/2017 presented a gas extraction plan that would allow only 24bcm/year to be extracted but that would be fixed for five years – this can be understood as trying to pre-empt yearly objections. However, also this plan was overthrown by the Council of State after objections of SIE-field actors in 2017.

Example 2: Research report into the relations between EUR and the fossil-fuel industry - transforming normative institutions

Outline activities: In 2015/16, EUR Fossil Free secured funding and support for a research into the relations of the 2nd biggest EUR faculty (Rotterdam School of Management, RSM) with the fossil fuel industry. The results of the research were published in 2017, clearly indicating that the fossil fuel industry, specifically Shell, BP, ExxonMobil and Gazprom, benefited from interacting with RSM. This included seats on the RSM advisory board, a contractual agreement that allowed Shell to influence curricula and students' profiles, or research sponsoring without disclosing this source of funding (Hüzeir and Fraser 2017). It is aimed at transforming the norms that are in place regarding whether and to which extent relations with the fossil-fuel industry are acceptable.

Forms activities take: Taking the overview by (Phillips and Lawrence 2012), these activities constitute 'discursive work' since the research activities are done in an attempt to 'influence processes of social construction' and also the closely related 'meaning work' which relates to 'the struggle over the production of mobilizing and countermobilizing ideas and meanings' (Benford and Snow, 2000: 613, in (Phillips and Lawrence 2012)).

Enabling/impeding factors: This instance of institutional work was made possible by the ongoing work of EUR Fossil Free related to gathering support among students and staff and putting climate change on the universities agenda to the extent that they were invited by the Executive Board of the University, which agreed to research the ties between the EUR and the fossil-fuel industry. It might also be enabled by the broadening and increasing societal discourse on climate change and associated actions (also in the aftermath of the Paris Climate Agreement of 2015).

Intended/unintended consequences: This instance of institutional work inspired a number of practices within the broader Fossil Free Movement, to also include non-financial relations next to

the focus on divestment, thus practices of groups such as Fossil Free Culture and Fossil Free Education. The EUR established a Commission which looked into the research and identified risks to integrity as well as recommended changes broadly in line with the initial report. A corporate register was installed where RSM staff disclose their ties with the corporate sector and the contract with Shell (allowing it to influence curricula) was stopped in December 2018. The report was also taken by a MP of the Socialist Party to organise a parliamentary debate also leading to a statement by the Minister of Education, Culture and Science. The latter, as well as the reaction by the Association of Universities in the Netherlands (VSNU) enforced the frame of the self-cleansing properties of academia and existing codes of integrity.

6.3.4 What forms do these activities linked to maintaining, creating and transforming institutions take (i.e. emotion work, boundary work, strategy work, practice work and/ or values work)? Link back to the 2-4 examples

This question has been answered under 6.3.3.

6.3.5. What factors have enabled and/or impeded institutional work? E.g. Resources, learnt lessons and competences connected to actors/ alliances/ networks/ collaborations. Link back to the 2-4 examples

This question has been answered under 6.3.3.

6.3.6. What have been intended and unintended effects (i.e. contributions) derived from conducting institutional work? What influence have they had on SIE-field and 'outside' institutional environments? Link back to the 2-4 examples

This question has been answered under 6.3.3.

6.3.7. Reflections on the main research question (base on answering the minor ones)

No additional reflections

7 Recommendations for our city partners, national and EU policy makers and SIE practitioners

In this section, we provide recommendations for different target groups based on the insights from this case study into framings against fossil fuel energy pathways in the Netherlands.

SONNET city partners

- Consider those actors working in your city on ‘framings against fossil-fuel based energy pathways’ as your ‘norm compass’, especially those who are reminding you of the broader societal and environmental goals that the city has formulated. They remind you of the greater purpose of administering a city that otherwise might easily get lost in the daily practice of policy making and implementation.
- Consider those actors working in your city on ‘framings against fossil-fuel based energy pathways’ as allies in your quest towards decreasing the CO₂ footprint of your city. Invite them to the table and let them help you find strategies and practices that are supportive of that broader goal.

National and EU policy makers

- Appreciate those actors working on ‘framings against fossil-fuel based energy pathways’ as pointing you to blind spots that might easily undermine any progress that you are achieving with climate policies, and also to worries and concerns that play a role for citizens.
- Make sure to fuel your own ‘opposition’ in support of a healthy democracy: Support those actors working on ‘framings against fossil-fuel based energy pathways’ with resources: to network and learn from one another, to engage in ideas and practices with the main aim to challenge existing discourses, norms and regulations – the extent to which these are maintained or transformed is then part of a democratic process.
- Support those actors, who are having a bridging function and can translate local issues to national or EU agendas – since what is easily dismissed as NIMBYism stems from very real concerns of citizens, which should not be considered in isolation but as part of a broader societal contract that weighs the benefits and disadvantages for everyone.

SIE-field-actors

- Network and find others to benefit from synergies, to inspire and support as well as learn from each other. This could mean, search for other individuals, groups and organisations

working on a similar broader goal or having a stake in your issue within the same locality; but also look beyond your locality (be that a city, region, or nation state) to get inspired and learn from elsewhere.

- Engage in a diversity of activities: either within your group or organisation or ensure that there are more groups focusing on the same goal using different practices and activities and thus targeting different institutions. While one takes the role of blaming, a second organises support through petitions, a third sits around the table with the incumbent actors and a fourth engages in legal action.
- Talk the language of the 'opponent': rather than going out and 'convincing' others, listen carefully to their argumentation and find the weak spots and turn them against themselves. The divestment movement questions the main argument of investments into fossil fuel industry, namely their security and profitability, especially on the long term.
- Address all three: what people talk about (discourses), what they consider 'right' (norms) and how it is organised (regulations). Since these aspects are interrelated, weakening or changing one is more easy when there is also movement in the others.
- Prepare for the long term and persist in your efforts.
- Dare to think beyond the horizon. If you reach your goals, set new goals. You might achieve more than you dreamt of when you started.

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9 Annex 1: Methodology

This section outlines the data collection strategies and methods as well as the data analysis steps for arriving at this case study. Overall, there have been severe budget constraints that did not allow us to dig deeper into a number of issues that we would have liked to explore – a total of 25 working days was allocated for data collection, analysis, writing up the case study and liaising with the case study researchers working on the comparative cases of Poland and the United Kingdom. In starting to research the different ‘framings against fossil-fuel energy pathways’ it became apparent that each of them actually constitutes a case study in their own right, and the report thus has become more a meta-analysis of three case studies rather than an in-depth case study. Especially the anti-fracking case had been studied quite thoroughly by a number of researchers, which we build on thankfully. However, neither for divestment in the Netherlands, nor for anti-Groningen gas information and analysis in this depth were available. SIE-initiatives engaging into ‘framings’ activities are active online and in social media, both of which are ideal sources helping to construct an overview of the emergence and development of the framings. These considerations have informed different data collection strategies for each case, which we outline in the following.

Methodology

Both researchers have not researched or been involved with neither anti-fracking nor anti-Groningen gas framings, but were familiar with these due to their public interest and partly prior research into the Dutch energy system. Both have been in touch with the divestment framings more in depth: Naomi due to her Bachelor thesis focusing on the initiative ‘Follow This’, which engages in shareholder activism; and Julia due to having been in touch with members of the EUR fossil free group and the ABP FossilVrij campaign as her colleagues at DRIFT. She also has signed the ABP FossilVrij petition in 2013. The interviewees involved in the divestment framings were thus closer and less close colleagues. Both researchers were sympathetic to the cause of the activists with regards to phasing out fossil fuel energy production and had to take critical distance to keep on challenging the emerging understanding and the familiarity with the normative orientation.

Anti fracking: A Scopus search yielded a number of academic articles on anti-fracking in the Netherlands that were also focusing on the different frames used throughout time. Based on these, we did a first analysis specifically focusing on frame changes and on establishing a timeline of events and an overview of involved actors. From these, we selected three for an interview, a researcher, an activist and a local councillor (see Table 1: List of interviewees). These interviews

were transcribed and coded and the analysis refined the existing timeline, actor overview as well as the analytical boxes. After the interviews, we did some very targeted internet searches to complement missing information. Since the website of the main SIE-initiative, Shale Gas Netherlands, was taken offline in January 2021 – while the research was ongoing – , we could only retrieve parts of it for gaining insights into the actual framings and actions of the initiative.

Anti-Groningen gas: For this framing, a vast array of information is available and in order to navigate it, we decided to build the case around the Groninger Bodem Beweging (GBB) as one of the long-standing SIE-initiatives in the field. The websites of GBB as well as the national NG Milieudefensie were used to construct a timeline along with a number of reports that provided guidance. In addition, institutional websites such as the one by the Province of Groningen and the Ministry of Economic Affairs, next to the one of the regional newspaper provided timelines of gas extraction in Groningen, which helped to navigate the main events. The history of gas extraction in Groningen knows a lot of different actors and storylines, we navigated this by staying with the most important frames that we could identify (e.g. damage compensation, reinforcement of houses, reduction of gas extraction and stopping gas extraction) but left out others (e.g. such as the one focusing on renewable energy). Based on these, a first timeline and actor mapping was done and two interviews scheduled: one with a person involved from the GBB and one from Milieudefensie. Their transcripts helped to refine the timeline, actor mapping and the analysis and were only complemented by targeted online searches. It must be clear that especially for this framing, we had to be very selective. Given more time and resources, more refined research into the framings, associated activities and especially actors networks would be possible.

Divestment: The research into the divestment framing started with a LexisNexis newspaper search of 6 Dutch newspapers (Volkskrant, Trouw, FD/online, De Groene Amsterdammer, NRC Handelsblad, Telegraaf) with the search word ‘divestment’. Based on the analysis of the relevant articles, a first timeline and actor mapping was constructed. This was refined using the information from the website of the SIE-initiatives FossilVrij NL – specifically focusing on two campaigns (EUR fossil free and ABP FossilVrij) to keep the amount of information manageable. This focus also led to the choice of two interviewees being involved in these campaigns. Their transcripts helped to refine the timeline, actor mapping and the analysis and were only complemented by targeted online searches afterwards.

While we used different sources of information, it was not always possible to triangulate all facts specifically due to the tightrope walk between covering the framings, associated activities and actors networks and between the tight resources for this case study.

Documents reviewed

For constructing the timelines and the innovation history, we have made use of different documents: grey literature, newspaper articles as well as academic papers. Most of what we used was information from websites. We have referenced the text thoroughly so that the reader can see where information comes from. All references are included in the reference list (Section 8). For the use of websites, we decided to refer to these using footnotes.

List of interviewees

We have interviewed seven people for this case study. We chose them due to their involvement as outlined above. While for the anti-fracking framing, we have three interviews from different backgrounds (research, local government, activism) to provide us with a more holistic picture, for the other two framings, we have interviewed two involved persons from an activism background. We chose for the latter due to our interest in the institutional work of the initiatives – which was more difficult to understand from secondary sources only. We could not interview more people due to limited resources, however, the case study could gain in richness and also in balance by including more views.

Table 1: List of interviewees

Code interview	Interviewee	Date of interview	Duration of interview	Interviewer
Interviewe e 1	Peter van de Wiel, Alderman Boxtel	21-01-2021	60 min	Julia Wittmayer, Naomi Schrandt
Interviewe e 2	Tamara Metze, Associate Professor in Public Administration and Policy, Wageningen University & Research	22-01-2021	60 min	Julia Wittmayer, Naomi Schrandt

Interviewe e 3	Willem Jan Atsma, Vice-chairman Schaliegasvrij Nederland	25-01-2021	60 min	Julia Wittmayer, Naomi Schrandt
Interviewe e 4	Chris Roorda, co-initiator ABP fossil free; former board member of FossilvrijNL	27-01-2021	60 min	Julia Wittmayer, Naomi Schrandt
Interviewe e 5	Ike Teuling, Former Campaign Manager Climate & Energy, Milieudefensie	18-02-2021	60 min	Julia Wittmayer, Naomi Schrandt
Interviewe e 6	Jelle van der Knoop, Chairman, Groninger Bodem Beweging	22-02-2021	70 min	Julia Wittmayer, Naomi Schrandt
Interviewe e 7	Vatan Hüzeir, Voorzitter, Stichting Fossilvrij NL	10-03-2021	70 min	Julia Wittmayer

List of meetings and events attended

During the duration of the case study work (December 2020 to March 2021), we did not encounter any relevant event that we could participate in – this must also be understood due to the COVID19 pandemic and the ensuing restrictions on social life.

10 Annex 2: Detailed SIE-field timeline

Detailed SIE-field timeline

This table provides an overview of the main events along which the narrative about the emergence and development of each of the SIE's and their fields can be told.

DATE	TYPE OF EVENT	DESCRIPTION OF EVENT	QUOTE & SOURCE e.g. document, interviewee
1959	SIE field event	Discovery of natural gas reserves in Groningen, the 'Groningen field'	NAM website (2020)
1974	Policy event	Introduction of the 'small-field-policy' encouraging the search for and extraction from smaller gas fields	NAM website (2020)
1991	Environmental shock	1 st Earthquake from 'Groningen field'	van Beukel (2016)
1993	SIE field event	NAM, KNMI and SodM confirm relation between gas production and earthquakes	van Beukel (2016), GBB website ¹⁶⁷ (2021)
2006	Environmental shock	Earthquake with 3.5 on Richter scale in Westeremden – people find each other for what later becomes de Groninger Bodem Beweging (GBB)	GBB website ¹⁶⁸ (2021)
2007/2008		Shale gas boom in the USA	Directorate-General for External Policies of the Union Policy Department (2013)
2008		350.org is founded in the USA	350.org Website ¹⁶⁹

¹⁶⁷ <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/>

¹⁶⁸ <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/>

¹⁶⁹ <https://350.org/about/>

PHASE 1: 2009-2013 Emergence of new anti-fossil-fuel framings and initiatives			
Anti-Groningen gas			
November 2009	SIE-initiative event	Groninger Bodem Beweging (GBB) founded	GBB website ¹⁷⁰
August 2012	Environmental shock	Earthquake in Huizinge (3.6 Richter)	DVHN website ¹⁷¹
January 2013	SIE field event	SodM and KNMI reassess the risks involved with gas extraction: introduce a production cap of 12 bcm to guarantee safety of people from Groningen	van Loo 2018, GBB website ¹⁷² 2021, (Muntendam-Bos and de Waal 2013; Staatstoezicht op de Mijnen 2013)
June 2013	SIE-initiative event	Stichting Waardevermindering door Aardbevingen Groningen (StWAG) founded	StWAG website 2021 ¹⁷³
2013	Policy event	Commission Meijer (Sustainable future North-East Groningen) presents their report “Trust in a sustainable future” including measures to compensate the negative effects from gas extraction	(Commissie Meijer 2013) Provincie Groningen website 2021 ¹⁷⁴
Anti-Fracking			
October 2009	SIE field event	Cuadrilla Resources is granted an exploration permit by the Minister of Economic Affairs for test drillings in Noord-Brabant	Metze (2018b)
2010	SIE field event	Cuadrilla Resources is also granted a permit for the area of the Noordoostpolder	Metze (2018b)

¹⁷⁰ <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/>

¹⁷¹ <https://www.dvhn.nl/groningen/Overzicht-alle-aardbevingen-van-2.0-en-zwaarder-in-de-provincie-Groningen-25853785.html>

¹⁷² <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/>

¹⁷³ <https://stwag.gr/over-ons>

¹⁷⁴ <https://www.provinciegroningen.nl/actueel/dossiers/gaswinning/tijdljn/2013/commissie-meijer/>

January 2011	SIE field event	The municipality of Boxtel organizes meetings and grants a local zoning permit to Cuadrilla	Cuppen et al. (2019), Metze (2018a), Interviewee F1
January 2011	SIE-initiative event	The municipality of Haaren organizes an information meeting including a contribution to the potential risks of fracking.	De Vries et al. (2013), Interviewee F3
May 2011	Environmental shock	Earthquakes in Blackpool (UK) that can possibly be linked to fracking, are a growing cause for concern	Dignum et al. (2015), Metze (2013), Metze (2018a)
Spring 2011	SIE-initiative event	'Schaliegasvrij Haaren is founded and together with Brabantse Milieu Federatie and Milieudefensie organize a movie night to broadcast the documentary Gasland	Metze (2013), Interviewee F3
June 2011	SIE field event	The provincial parliament of Noord-Brabant and the municipality of Boxtel write a letter to the Minister of Economic Affairs to ask for a moratorium on fracking and an independent study on the consequences of fracking. This request was turned down by the Minister	Cuppen et al. (2019), Trouw Redactie (2011a), Trouw Redactie (2011b)
August 2011	SIE-initiative event	The first municipality, Tholen, declares itself 'shale gas free' after Milieudefensie starts informing municipalities about fracking	Cuppen et al. (2019)
September 2011	Media event	The documentary 'Gasland' is broadcasted on Dutch national television, which leads to considerably more attention on the subject on a national scale	Dignum et al. (2015)
September 14, 2011	SIE field event	Hearing in Second Chamber about the risks of fracking.	Tweede Kamer der Staten-Generaal (2011, September 14)
October 2011	Policy event	Court rules that the local zoning permit that was issued to Cuadrilla for test drillings in Boxtel is invalid	Metze (2013), Metze (2018a)

2011	SIE field event	Carbon Tracker Institute issues report outlining the “Carbon Bubble”	Carbon Tracker Initiative 2011, E, etc.
Divestment			
March 2013	SIE-initiative event	Launch of Divestment movement in the Netherlands with an event at the VU Amsterdam	(Tielbeke 2015)
October 2013	SIE-initiative event	Fossil Free Europe Tour with stopover in Amsterdam	FossielVrij Website 2013 ¹⁷⁵
2013	SIE-initiative event	EUR Fossil Free started (still named Consider Climate)	Interviewee 7
PHASE 2: 2012 – 2017 National frames on energy transition and growth of movements			
Anti-Groningen Gas			
January 2014	Policy Event	Governmental decision on ‘Gas extraction in Groningen’ : reduce extraction, compensation package, future perspective; and administrative agreement ‘Trust in repair and repair of trust’	(Kamp et al. 2014; Ministerie van Economische Zaken 2014)
March 2014	SIE-field event	Dialogue platform involving stakeholders in developments of plans and decisions for the gas extraction area	GBB website 2021 ¹⁷⁶ , Provincie Groningen website ¹⁷⁷
October 2014	SIE-field event	Centre for Safe Living established to handle damage claims	RTVNoord website ¹⁷⁸
December 2014	SIE-initiative event	Torchlight procession in Groningen against governmental gas extraction plans for 2015	Milieudefensie website ¹⁷⁹

¹⁷⁵ See <https://gofossilfree.org/nl/press-release/fossil-free-netherlands-campaign-launches-with-a-win/>

¹⁷⁶ <https://www.groninger-bodem-beweging.nl/gbb/geschiedenis/>

¹⁷⁷ <https://www.provinciegroningen.nl/actueel/dossiers/gaswinning/tijdlijn/2014/start-dialoogtafel-groningen/>

¹⁷⁸ <https://www.rtvnoord.nl/aardbevingen/tijdlijn>

¹⁷⁹ <https://milieudefensie.nl/actueel/fakkeltocht-groningen-uit-protest-tegen-gasbesluit-kamp-gaswinning-moet-veel-verder-omlaag>

February 2015	SIE-field event	Dutch Safety Board publishes report concluding that safety of the population has been ignored in decision making on gas extraction in the past	(Onderzoeksraad voor Veiligheid 2015)
June 2015	SIE-field event	The National Coordinator Groningen (NCG) starts and takes the regie over damage and reinforcement claims, and a future perspective for the region	NCG Website ¹⁸⁰
November 2015	Legal ruling	The Council of State (after 40 parties had filed applications for judicial review) rules that gas extraction is limited to 27 bcm for the gas year 2015/2016.	Raad van State Website ¹⁸¹
January 2016	SIE-field event	Groningen GasMeeting is established as a societal platform next to NCG (and Dialogue Platform Groningen is discontinued)	Provincie Groningen website ¹⁸²
January 2016	SIE-initiative event	Torchlight procession in Groningen Groningen against governmental gas extraction plans for 2016	Milieudefensie website ¹⁸³
January 2016	SIE-initiative event	GBB publishes its first GBB newspaper reporting about gas extraction from a resident's perspective	GBB 2016
June 2016	Policy event	Minister of Economic Affairs presents draft gas decision planning for extraction of 24bcm/year for the coming five years this leads to legal action by societal organisations including Milieudefensie and GBB and the request to stop gas production	Milieudefensie website ¹⁸⁴
November 2016 – March 2017	SIE-initiative event	Knitting for Groningen campaign by Milieudefensie	Breien met Agnes website ¹⁸⁵

¹⁸⁰ <https://www.nationaalcoordinatorgroningen.nl/actueel/nieuws/2015/mei/01/overheidsdienst-groningen-per-1-juni-2015-van-start>

¹⁸¹ <https://www.raadvanstate.nl/@8695/gaswinning-groningen/>

¹⁸² <https://www.provinciegroningen.nl/actueel/dossiers/gaswinning/tijdljn/2015/dialoogtafel-beeindigd/>

¹⁸³ <https://milieudefensie.nl/actueel/veel-groningers-en-niet-groningers-de-spraak-op-tegen-gasbesluit-van-minister-kamp>

¹⁸⁴ <https://milieudefensie.nl/actueel/historisch-de-rechter-vernietigt-het-gasbesluit>

¹⁸⁵ <https://breienmetagnes.nl/breien-voor-groningen/>

February 2017	SIE-initiative event	Torchlight procession in Groningen Groningen with 5000 people for a 'gas free future'	Milieudefensie website ¹⁸⁶
November 2017	Legal ruling	The Council of State (after 20 parties had filed applications for judicial review) overthrows the gas decision from 2016 and rules that the Minister needs to reach a better substantiated decision, gas extraction is limited to 21,6 bcm for the gas year 2016/2017.	Raad van State website ¹⁸⁷
Anti-Fracking			
October 2011	SIE field event	The Minister of Economic Affairs announces a moratorium and an independent study into the risks of fracking	Cuppen et al. (2019)
December 2011 - February 2012	SIE field event	Consultation rounds of government with stakeholders to decide scope of research	Cuppen et al. (2019), Metze (2018a)
February/March 2012	SIE-initiative event	Milieudefensie's 'shale gas free' campaign takes off; the municipalities of Boxtel and Haaren declare themselves shale gas free	Cuppen et al. (2019), Interviewee F3
April 2012	SIE-initiative event	Schaliegasvrij Nederland is founded, a national foundation to protest fracking with the support of Milieudefensie, Greenpeace and local ENGO's	Cuppen et al. (2019)
June 2012	SIE field event	Sounding Board is established with participants from consultation round to keep them involved in the study	Cuppen et al. (2019), Metze (2018a)
Summer 2012	External event	Declining gas prices in the US made several companies depreciate their shale gas investments; questions are raised about the utility and necessity of shale gas	Cuppen et al. (2019)

¹⁸⁶ <https://milieudefensie.nl/actueel/een-vlammend-protest>

¹⁸⁷ <https://www.raadvanstate.nl/uitspraken/@109356/201608211-1-a1/#highlight=Groningen%20gas>

September 2012 – August 2013	SIE field event	Doubts concerning the independency of the research bureau, and the expert involved in the Sounding Board	Cuppen et al. (2019), Metze (2018a), Interviewee F3
March 2013	SIE field event	Cuadrilla announces specific locations for test drillings in Noordoostpolder	Cuppen et al. (2019)
March 2013	SIE initiative event	Schaliegasvrij Noordoostpolder was founded, under consultation of Milieudedefensie with help from Schaliegasvrij Nederland	Cuppen et al. (2019), Interviewee F3
June 2013	SIE field event	Manifest of professors criticizing shale gas developments	Cuppen et al. (2019)
August 2013	Policy event	Minister of Economic Affairs decides to prolong the moratorium since the research results are controversial and starts a Rijksstructuurvisie and an environmental impact assessment (plan-MER)	Cuppen et al. (2019) Metze (2018a), Milieudedefensie (2014)
September 2013	SIE-initiative event	The ‘shale gas free’ campaign of Milieudedefensie continues to spread across the Netherlands. The Noordoostpolder declares itself shale gas free.	Cuppen et al. (2019), Metze (2018a)
September 2013	SIE field event	The social democratic party (PvdA), part of the governing coalition, changes its standpoint towards fracking from “yes, but only safe” to “no, unless safe”, therewith putting pressure on the governing coalition	Metze (2018a)
April 2014	SIE-initiative event	A second organization against shale gas is founded in the Noordoostpolder: Shale gas NO Noordoostpolder	Rasch & Kohne (2016)
September 2014	SIE-initiative event	Rabobank organizes network meetings in Noordoostpolder, which leads to the foundation of a third initiative in the Noordoostpolder: Tegengas	Rasch & Kohne (2016)
December 2014	External event	Oil prices were at an all-time low, with declining shale gas revenues as a result	Metze (2018a)
Divestment			

March 2014	SIE-initiative event	Launch of ABP-Fossil Free Campaign	Fossilvrij website 2014 ¹⁸⁸
September 2014	SIE-initiative event	Signed letter by 17 organizations to ABP to divest from fossil fuels	(Bouma 2014)
September 2014	SIE field event	1 st Meeting FossilVrij NL & ABP	(Bosman 2021; Tielbeke 2015)
March 2015	SIE-initiative event	Petition with 13,000 signatures handed to ABP during a public seminar	(Bijlo 2018; Bosman 2021)
October 2015	Sie field event	1 st Sustainability Policy ABP	(Bosman 2021; Tielbeke 2015)
November 2015	Media event	Documentary about Fossil Free and Divestment on Dutch television	(Fossilvrij NL and 350.org 2017; Kieft 2015)
November 2015	SIE field event	Nederlandsche Bank-voorzitter Klaas Knot zei dat er 'zoiets is als een carbon bubble.'	(Mommers 2016)
December 2015	Policy event	Paris Climate Agreement, resulting from Paris Climate Conference	
March 2016	SIE-initiative event	Stichting FossilVrij founded	(Fossilvrij NL and 350.org 2017)
2016	SIE-initiative event	Research into ties of the Erasmus University Rotterdam (RSM faculty) and fossil industry started	Interviewee 7
PHASE 3: 2015-2020 Regulatory successes and reoriented frames			
Anti-Groningen Gas			

¹⁸⁸ See <https://gofossilfree.org/nl/press-release/financierings-stop-kolencentrales-gaat-rutte-fossilvrij/>

January 2018	Environmental Shock	Earthquake in Zeerijp, 3,4	DVHN website ¹⁸⁹ , Milieudefensie website ¹⁹⁰
January 2018	SIE-initiative event	Torchlight procession with 10,000 people marching and 53,000 signing a petition against the passive attitude by the government and the NAM	Milieudefensie website ¹⁹¹
January 2018	Policy event	Governmental decision Mining damage Groningen including a new protocol for handling damage from ground movements and a compensation package of 18 billion Euros by the NAM and the government	(Ministerie van Economische Zaken en Klimaat 2018c)
February 2018	SIE-field event	State Supervision of the Mines advises to reduce gas extraction to 12 bcm/year	(Staatstoezicht op de Mijnen 2018)
March 2018	Policy Event	Governmental decision to end gas extraction in the Groningen area by 2030	(Ministerie van Economische Zaken en Klimaat 2018a)
March 2018	SIE-field event	Temporary Commission Mining Groningen established for the handling of damage claims independent from NAM	(Ministerie van Economische Zaken en Klimaat 2018c), Groningen.Nieuws.nl Website ¹⁹²
August 2018	SIE-initiative event	Week long action camp including blockades in Groningen organized by Code Rood	Milieudefensie website ¹⁹³
September 2018	SIE-initiative event	Appeal to stop gas extraction also beyond the Groningen field	Milieudefensie website ¹⁹⁴

¹⁸⁹ <https://www.dvhn.nl/groningen/Overzicht-alle-aardbevingen-van-2.0-en-zwaarder-in-de-provincie-Groningen-25853785.html>

¹⁹⁰ <https://milieudefensie.nl/actueel/zwaarste-aardbeving-in-groningen-sinds-2012>

¹⁹¹ <https://milieudefensie.nl/actueel/fakkeltocht-na-zware-aardbeving-groningen>

¹⁹² <https://groningen.nieuws.nl/nieuws/631609/tijdelijke-commissie-mijnbouwschade-groningen-maakt-voorlopige-werkwijze-schadeafhandeling-bekend/>

¹⁹³ <https://milieudefensie.nl/actueel/gasbesluit-wiebes-toont-weinig-energie>

¹⁹⁴ <https://milieudefensie.nl/actueel/meer-gas-uit-de-rest-van-nederland-dan-uit-groningen>

October 2018	SIE-field event	National Programme Groningen starts to work on a sustainable future for the region	(Ministerie van Economische Zaken en Klimaat 2018b)
October 2018	Policy Event	Changes in the gas law and the mining law to minimize gas extraction ‘Not more than necessary’	(Ministerie van Economische Zaken en Klimaat 2018d)
June 2019	SIE-field event	Climate Agreement	(Klimaatberaad 2019)
September 2019	Policy event	Government declares to stop gas extraction from the Groningen field in 2022	(Ministerie van Economische Zaken en Klimaat 2019)
July 2020	Policy event	Temporary Law Groningen in place which regulates that damage and reinforcement claims are to be handled under public law	(Ministerie van Economische Zaken en Klimaat 2020b)
July 2020	SIE-field event	Institute Mining Damage Groningen (IMG) established to handle damage claims	IMG Website ¹⁹⁵
November 2020	Policy event	Announcement of proposals to change laws so as to prohibit gas extraction from Groningen field	(Ministerie van Economische Zaken en Klimaat 2020a)
February 2021	Policy event	Parliamentary commission of inquiry Natural Gas Extraction Groningen started to inquire into decision making about gas extraction, earthquakes, damage handling and reinforcement of houses.	Tweede Kamer Website ¹⁹⁶
Anti-Fracking			
June 2014	Policy event	Resolution in the Parliament to take into account decentral governmental bodies in the decision-making process during the revision of the Mining Act and in the Structuurvisie Shale Gas	Tweede Kamer der Staten-Generaal, 2014 ¹⁹⁷

¹⁹⁵ <https://www.schadedoormijnbouw.nl/over-het-img>

¹⁹⁶ https://www.tweedekamer.nl/kamerleden_en_commissies/commissies/peag

¹⁹⁷ <https://zoek.officielebekendmakingen.nl/kst-33952-7.html>

October 2014	Policy event	The Minister of Economic Affairs announces that the Structuurvisie Shale Gas is delayed due to 5000 pages of critical reactions already received from 2462 people and organizations and 336 local governments	
October 2014	SIE initiative event	221 municipalities, 9 provinces and 1 water board have declared themselves 'shale gas free'	Milieudefensie (2014) ¹⁹⁸
December 2014	SIE field event	Parliamentary debate about the plan-MER and and Structuurvisie Shale Gas. Twelve resolutions are submitted to stop continued research and drillings and to strengthen the requirements for shale gas exploration. Example: motion SP to rule out test drillings during the Cabinet period.	Vewin (2014) ¹⁹⁹
February 2015	Policy event	Presentation of the environmental impact assessment (plan-MER)	Metze (2018a)
April 2015	Policy event	Amendment in the Second Chamber to extend the ground for refusal for a permit under the Mining Act, so that environmental concerns are also considered and the burden of proof of damage lies with the operator.	Vewin (2015) ²⁰⁰
July 2015	Policy event	The Minister of Economic Affairs declines the prolongation of the permit of Cuadrilla	Milieudefensie website ²⁰¹ , Raad van State (2018)
May/June 2016	SIE field event	Newspaper articles mention shale gas as example related to TTIP, the trade agreement and possible dangers for European countries. The journalist uses shale gas as example to illustrate that TTIP could result in businesses having the power to overrule governmental restriction	Metze (2018a)
January 2017	Policy event	Modification Mining Act	Raad van State (2018)

¹⁹⁸ See <https://milieudefensie.nl/actueel/schaliegasmoratorium-verlengd-tot-2016-na-duizenden-kritische-reacties>

¹⁹⁹ See https://www.vewin.nl/nieuws/paginas/Tweede_Kamer_scherpt_voorwaarden_schaliegas_aan_668.aspx

²⁰⁰ See https://www.vewin.nl/nieuws/paginas/Grondwater_en_drinkwaterkwaliteit_beter_beschermd_door_uitbreiding_weigeringsgronden_mijnbouwwet_695.aspx

²⁰¹ See <https://milieudefensie.nl/wonen-zonder-gas/hoe-schaliegas-opkwam-en-ten-onder-ging>

February 2018	Policy event	The Minister of Economic Affairs and Climate declares that shale gas is no longer an option for the Netherlands. This decision is established in policy documents, such as the Nationale Omgevingsvisie (NOVI)	Metze (2018a)
14 March 2018	Policy event	Cuadrilla Resources takes up the decision of the Minister to not prolong the permits for shale gas exploration on appeal by going to court. Cuadrilla is proven right by court	Milieudefensie (n.d.), Raad van State (2018)
27 March 2018	Policy Event	Liesbeth van Tongeren (GroenLinks) files a motion to exclude shale gas from the Structuurvisie Ondergrond and that shale gas exploration has no place in The Netherlands. This motion was approved with 148 out of 150 votes	Tweede Kamer der Staten-Generaal (2018) ²⁰²
June 2018	Policy event	STRuctuur visie ONderGrond, abbreviated to STRONG, is published. The Structuurvisie Schaliegas should have been integrated in this overall structural vision subsoil, but based on the decision of the Minister of Economic Affairs on February 2018, shale gas is excluded from the structural vision.	Ministerie van Infrastructuur en Waterstaat (2018)
July 2019	Policy event	The Minister of Economic Affairs makes a new decision concerning the prolongation of the permit of Cuadrilla on the basis of the in the meantime modified Mining Act, that now takes into account environmental concerns as ground of refusal	Milieudefensie website ²⁰³
Divestment			
May 5-13, 2017	SIE-initiative event	Global Divestment Mobilisation: In NL: 5 universities, 3 pension funds, activities in The Hague, at ING Bank Amsterdam and the 'Drop the Shell' performance of Fossil Free Culture NL in Amsterdam.	(Fossilvrij NL and 350.org 2017)

²⁰² See <https://www.tweedekamer.nl/kamerstukken/detail?id=2018Z05374&did=2018D21638>

²⁰³ See <https://milieudefensie.nl/wonen-zonder-gas/hoe-schaliegas-opkwam-en-ten-onder-ging>

May 2017	SIE-initiative event	Research report 'A pipeline of ideas' into the ties of the Erasmus University with the fossil fuel industry	(Hüzeir and Fraser 2017)
May 2017	SIE-initiative event	Dirty & Dangerous Report ABP #1	(Both Ends, Urgewald, and Fossilvrij NL 2017)
June 2017 and August 2017	Policy event	Reaction of the Minister of Education, Culture and Science to the research into ties of the EUR with the fossil fuel industry	(Tweede Kamer der Staten-Generaal 2017, 2018)
September 2017	Policy event	'Thirty members of parliament debate' on the relations between universities and the fossil fuel industry	(Tweede Kamer der Staten-Generaal 2018)
November 2017	SIE-initiative event	Launch of Climate Label for Pensions	Fossilvrij NL website 2017 ²⁰⁴
January 2018	SIE field event	Subsidy by PostcodeLoterij of 1 million for Stichting FossilVrij and 350.org	(Bijlo 2018; Fossilvrij NL 2019)
May 2018	SIE-initiative event	Dirty & Dangerous report APB #2	(Both Ends, Urgewald, and Fossilvrij NL 2018)
June 2018	Policy event	Reaction of the Minister of Education, Culture and Science to the way the EUR handled the research into its ties with the fossil fuel industry	(Tweede Kamer der Staten-Generaal 2018)
December 2018	SIE-initiative event	Research report PFZW #2	(Fossilvrij NL 2019)
December 2018	SIE field event	RSM at the Erasmus University Rotterdam stops its contract with Shell	(Fossilvrij NL 2020) (EM Magazine Website 2019 ²⁰⁵).
2018	SIE field event	The Dutch Central Bank cautions about 'carbon bubble', investments	(Bijlo 2018)

²⁰⁴ See <https://gofossilfree.org/nl/press-release/pensioenfondsen-investeren-in-strijd-met-klimaatdoelen-parijs/>

²⁰⁵ See <https://www.erasmusmagazine.nl/en/2019/02/27/rsm-ends-controversial-contract-with-shell/>

March 2019	SIE-initiative event	'DivestInvest Pledge: Dutch private investors worth 200 million announce to divest	(Fossilvrij NL 2020; Groot 2019)
May 2019	SIE-initiative event	Dirty & Dangerous report ABP #3	(Both Ends et al. 2019)
December 2019	SIE-initiative event	Research report PFZW #2	Fossilvrij Website 2019 ²⁰⁶
2019	SIE-initiative event	Research report PFHC	(Fossilvrij NL 2020)
February 2020	SIE field event	Pension fund ABP new policy for responsible investment 2020-2024 including a phasing out of investments in tar sand and brown coal	(ABP 2020)

²⁰⁶ See <https://gofossilfree.org/nl/zorg-en-welzijn-steekt-nog-meer-geld-in-bedrijven-die-klimaatcrisis-veroorzaken/>