

# An actor-based value analysis of the decision-making process of underground hydrogen storage in salt caverns in the Netherlands

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by

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## Preface

This research was conducted to receive the master's degree in the Complex System Engineering & Management (CoSEM) program at the Delft University of Technology. The completion of this research marks the end of seven years of academic development, starting in Groningen and ending in Delft. During my academic career, I have specialized in the energy industry and the energy transition. The ultimate conception of this specialization is this master's thesis, where I combine distinct CoSEM knowledge to assess an established energy system. A detailed analysis of a real-life complex socio-technical energy system is created through system thinking. This system is part of the potential nationwide hydrogen network that will be created in the near future and is essential for its success. During this thesis, I gained insight into the future challenges of a nationwide hydrogen network, sparking my ambition to contribute to solving these challenges in my professional career.

I want to thank Aad Correljé, Udo Pesch, and Nynke van Uffelen, my supervisors at TU Delft, for their academic guidance during my research. Their expertise and constructive feedback have helped me to form a thorough analysis and conclusion. I would also like to thank Alfred Nijenhuis and Joost Ritsma, my supervisors at Arcadis, for their practical guidance during my research. Their established position within the research subject kickstarted my research and formed meaningful connections within Arcadis and relevant system actors. Moreover, I would like to thank all the interviewees for their time and for providing me with their knowledge of the research subject. Their essential opinions form my analysis's foundation and have allowed me to draw my conclusion for this research. Lastly, I would like to thank my loved ones for debating my opinions and supporting me during my studies.

I wish you a pleasant reading of this thesis.

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## Executive Summary

Successful development of the hydrogen economy would mean an effective cure for the world's energy crisis (Abe, Popoola & Ajenifuja, 2019). Mazzolai (2012) found that one of the most considerable barriers to its deployment is the development of large stationary hydrogen storage systems. Researchers suggest underground storage in depleted gas fields and geological formations to overcome this barrier of stationary storage. As found by Abe et al. (2019), the most promising form of which is salt caverns. The Hyway 27 study, a report that explores the feasibility of a Dutch national hydrogen grid, proposes the installment of 6 PJ of storage capacity in salt caverns (Tezel et al., 2021; Juez-Larré et al., 2019). This research explores the socio-technical possibility of such a system within the Netherlands. When local perception of values is not considered during decision-making, local resistance potentially grows and halts the project and even the entire sector (Dignum et al., 2015; Geukes et al., 2021). Therefore, an aligned perception of values is essential for actors' acceptance of the decision-making process. Consequently, the research goal is to identify relevant value dimensions of actors to facilitate a more inclusive decision-making process for the realization of *underground hydrogen storage in salt caverns* (UHS-s). This research utilizes a qualitative design approach by combining literature research with interviews and data coding. Through literature, the research is positioned within the technical and institutional setting. The Value Analysis Framework is operationalized to capture arguments from interviews via a coding software scheme.

The literature research first explored the technical setting of UHS-s. Caglayan et al. (2020) found that the Netherlands has the second largest UHS-s potential in continental Europe, with a total of 10.4 PWh. Detz et al. (2020) and Juez-Larré (2019) conducted a more detailed analysis, only considering the most suitable locations. A potential 321 salt caverns were identified with a total energy content of 43 TWh. These caverns reside for 65 percent in the four most northern provinces in the Netherlands. Next, the institutional setting is explored by analyzing the Mining Act, Surroundings Act, and their related procedures. The new project procedure of the Surroundings Act follows a decentralized philosophy where control over the participation of regional and local actors is put in the hands of the project initiator. While the competent authority, the *ministry of economic affairs and climate policy* (EZK), takes a facilitating role in this process. Unlike the old rigid three-step procedure, the new approach follows an open framework to allow the customizability of participation per project (Roels et al., 2015). However, Winter et al. (2020) suggest that this openness also gives room for minimum legal compliance, posing a risk that actors' interests might not be safeguarded.

Following the literature research, this research operationalizes a framework to capture value dimensions during the interviews. The Value Analysis Framework builds upon a frame of reference consisting of two axes. The actor position relates to the organizational position of interviewees within the UHS-s setting, while the spatial orientation relates to the locality of the expressed arguments. Next to the frame of reference are the conceptual theories. These consist of three combined theories for the conception of value dimension by arranging arguments into norms that can be aggregated into value dimensions (Gioia et al., 2013; Dignum et al., 2015). The Value Analysis Framework operationalizes value dimensions from individual opinions while providing feedback on its origin, ensuring traceability and objectivity. Seventeen semi-structured interviews were held to depict the decision-making process in the UHS-s debate accurately. Interviewees ranged from field experts and large operators to local municipalities and NGOs. To maintain a common direction, the interviews followed an interview guide. The interviews were transcribed to collect relevant arguments as open-source codes in qualitative data analysis software. The arguments were pooled into ten different norms and aggregated into three value dimensions. Objectivity was ensured through the proportional division of arguments alongside the frame of reference.

The three identified value dimensions during the interviews consisted of responsibility, distributive justice, and procedural justice, each conforming to an essential aspect of the decision-making process. Responsibility comprises the norms assessment framework, governmental interest, and Surroundings Act. Overall, the value dimension relates to the coherence of vision and policies across the frame of reference. A lack of national vision and policies has led to confusion on the direction and integrity of UHS-s. UHS-s policies from ministries and decentralized governments were not centrally directed but created out of self-interest, further fragmenting the system. Atop the confusion lies an open project procedure that most actors believe should be further defined in terms of participation for it to be effective. The value dimension of distributive justice consists of the norms of cost-benefit consideration, value creation, and stacking activities. This value relates to the fair distribution of these norms and the consequential external effects. Most actors say this is currently not the case in the northern Netherlands. Actors believe that regional and local values must be embedded with every project for UHS-s to become viable in this region. If regional and local actors cannot recognize value, saturation of the area is a potential consequence. The value dimension of procedural justice consists of the norms of communication, transparency, frankness, and (dis)trust. This dimension relates to the relational behavior during and after the decision-making process. Most actors believe that proper communication, transparency, and frankness are necessary to build trust amongst actors, making it essential to facilitate participation within the project procedure. Actors generally hold different perspectives on how to create an inclusive decision-making process. Most dominantly, actors believe that the installment of a national vision and assessment framework would align actors and policies across the spatial scale. By extending the current institutional boundaries, a greater sense of trust in the successful fulfillment of the project procedure would be installed. All actors believe local value should drive participation within this procedure, meaning that local participation should operationalize how to create local value.

Each value dimension and actor perspective tells a story that coherently presents a structured manner to create an inclusive decision-making process. The lack of national vision on UHS-s has led to fragmented and inconsistent policies. EZK is desired to take a guiding role and develop this vision through a national assessment framework. In the northern Netherlands and Groningen specifically, mismanagement of distributive justice has led to a feeling of distrust and saturation amongst actors. For UHS-s to succeed, the regional value must be expressed to these actors. Additionally, a sense of procedural justice amongst all actors is necessary to gain trust. Frequent communication between actors and a transparent and frank procedure is essential to creating this trust. Ultimately, a successful procedure entails that all actors participate in the project procedure and are capable of operationalizing local value. By integrating the findings of this research, current shortcomings can be overcome, and an inclusive decision-making process can be designed. This research recommends creating a central form of guidance for the decision-making process to succeed. EZK must lead in developing a national vision and forming an assessment framework. Such a role strengthens communication across the spatial scale, establishes trust, and paves the ground for better participation in the project procedure. To overcome the proposed shortcomings around the project procedure, this research recommends extending the institutional boundaries of the current project procedure without altering its structure. The project procedure can be clarified without standardizing the process by incorporating the proposed norms and values and creating a shared understanding of local value. EZK is already running at total capacity and potentially cannot expand towards these operations. Therefore, it is recommended that EZK is aided in fulfilling a guiding role by governmental or private advisory agencies. The research findings should be applied in comparable settings where the project procedure will impact the decision-making process to potentially uncover new actor perspectives. This research is qualitative, making the findings unique to the research process. The subjectivity of interviewees and the researcher and the ever-changing timeframe of the UHS-s debate account for this uniqueness. The selection of actors for this research installs a notion of publicness regarding residents' perspectives, where the findings try to approach but will never truly grasp reality.



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## Chapter 1.

### Introduction

#### 1.1 Relevance

At the recent UN climate summit in Glasgow, Boris Johnson told the world, “Humanity has long since run down the clock on climate change; it is one minute to midnight on that doomsday clock, and we need to act now” (Johnson, 2021). World leaders have realized that the current energy generation mix, mainly still consisting of fossil-fuel-based generation plants, must drastically change to reach the goal of maximum heating our planet by 1.5 degrees Celsius. For the global energy transition to succeed, new challenges must be overcome. Such as the global power shift from fossil-rich countries to countries with high renewable potential (IEA, 2019). And more importantly, the fact that this renewably produced electricity cannot be efficiently stored. This brings forth problems of grid transmission, distribution, and balancing of the day-ahead market, as stated by Parra et al. (2017). This is one of the primary bottlenecks to overcome for renewable energy generation to become the primary energy source worldwide.

An extensive array of solutions has been researched to overcome the storage problem of renewably generated electricity. Bouckaert et al. (2021) mention batteries, flywheels, and pumped hydraulic batteries. However, the article states that the most promising alternative is Power-to-Gas (P2G). P2G is an energy storage technique in which electrical energy is converted into chemical energy in the form of gas by using electrolysis (Gondal, 2019). Electrolysis is an energy conversion technique in which electrical currents are induced to change the chemical structure of a compound (Gondal, 2019). The produced gas can then be stored and transported across distribution networks. Gondal (2019) states that several types of gases are used in P2G processes, but hydrogen is the most prominently researched gas. The widespread utilization of hydrogen in P2G applications is commonly referred to as the hydrogen economy (Bockris, 2013). Bouckaert et al. (2021) explain how electricity generated by renewables is stored in chemical energy in the form of hydrogen, which can be transformed back into electricity when needed. Successful development of the hydrogen economy would mean an effective cure for the world's energy crisis and result in tremendous advantages for the environment, energy security, economy, and the final consumer (Abe, Popoola & Ajenifuja, 2019). However, according to a recent IEA report (2019), it copes with numerous challenges that must be overcome before large-scale applications become technically and economically feasible. Including safety and environmental concerns cost of building transmission and distribution networks. But most importantly, the creation of feasible storage options (IEA, 2019). Expanding on this, Mazzolai (2012) found that the most significant barrier is the development of adequate materials facilitating the widespread deployment of *Large-Scale Energy Storage* (LSES). To overcome this barrier of LSES, more economical and practical options are being explored by scientists and engineers. One extensively researched option is *Underground Hydrogen Storage* (UHS) in depleted gas fields and geological formations (Tarkowski, 2019). As found by Abe et al. (2019), the most promising form of which is salt caverns. The reason is that salt caverns are impervious to hydrogen due to thick outer layers of salt formation, effectively preventing leakage even at very high pressures (Juaz-Larré et al., 2016). The fact that most salt caverns are easily reachable makes these geological formations an ideal candidate for pressurized UHS (Abe et al., 2019; Tezel et al., 2021).

With the rising scientific interest and solutions towards the realization of the hydrogen economy, follows an increasing interest of companies and countries. One such country with a profound interest in creating a national hydrogen network is the Netherlands. The state secretary of the Ministry of Economic Affairs and Climate Policy, in Dutch, *Economische Zaken en Klimaat* (EZK), has stated that the Netherlands has always had a leading role in the European natural gas industry and that ‘we can cost-effectively convert our excellent gas network, offering a major sustainability opportunity that we must not miss’ (Zegerius, 2020). Also, a report on the Dutch energy network, written by Sectorraden (2006), discusses potential energy shortages in urban and industrial areas due to geographical distribution problems. To overcome such issues, the report suggests investing in forms of energy storage capacity. Verhoeven (2010) indicates that stationary hydrogen storage offers a techno-economic feasible form of strategic and tradable storage capacity. Consequently, widespread utilization of hydrogen can pose significant economic and tactical benefits to the Netherlands. As a response, the ministry of EZK, Gasunie, Tennet, and several major Dutch industries carried out the Hyway 27 study: a report that explored the feasibility and challenges of creating a Dutch national hydrogen grid called the ‘hydrogen backbone’ by converting the existing gas network. The report includes research on renewable generation, import, and storage options (Tezel et al., 2021; Vasbinder, de Vries, Westerman, 2021). The report concludes that repurposing the national gas transmission would be possible and recommends creating a plan to roll out such a network. It also proposes a kick-start to create an integrated supply chain and imposes several policy challenges (Tezel et al., 2021). The report defines a complex socio-technical system in which technical and institutional settings are identified. Its goal is the practical creation and integration of a transmission grid in which several industrial clusters are to be fed within the supply chain.

## 1.2 Context

This research shall focus on the potential of UHS in salt caverns within the Netherlands. The Hyway 27 study considers the techno-economic feasibility of Underground Hydrogen Storage in Salt Caverns (UHS-S). However, no detailed description of achieving adequate storage capacity in the project's timeframe is contemplated. Within this research, a qualitative approach is presented, in which the actor playing field will be considered and internalized. Ultimately, the study creates a framework to analyze the current socio-technical context and presents barriers to the widespread application of UHS-s in the Netherlands. The stated research problem and its context align with the requirements of *a Complex System Engineering and Management* (CoSEM) MSc Thesis since the problem is situated within the hydrogen backbone, a large-scale complex socio-technical system within the energy sector of the Netherlands. Also, it tries to incorporate small-scale socio-technical sub-systems, UHS-S, into this context. This requires the alignment of institutional and social interrelations between relevant actors while also fulfilling technical and economic requirements. This research can distinctively be linked to the energy track of the CoSEM Msc since possible findings will guide the adoption of new future energy systems.

According to Weeda & Gigler (2018), the storage of energy underground is expected to increase within the energy transition due to its vital role in balancing fluctuations in seasonal heat demand. Their research also mentions that it could act as a buffer for increased volatility in energy generation from wind and solar. *Underground Hydrogen Storage in depleted gas fields* (UHS-g) and UHS-S are proven technologies and have been commercially applied worldwide (Juaz-Larré, 2019). According to a report by Hévin (2019), there are four active UHS-s sites worldwide. Three large sites lay in the US, each with a capacity of over 90 GWh, and one smaller site in the UK (25 GWh), serving as a secure buffer for industrial feedstock demand, which has been in operation since 1972. There have also been recent pilots of successful UHS-s in depleted gas fields in Austria, Argentina, and the Netherlands (Hévin, 2019; Tarkowski, 2019). However, in his study of

the technical potential of hydrogen storage in Europe, Caglayan et al. (2020) state that salt caverns offer the advantage of lower cushion gas requirements and a larger sealing capacity due to the static nature of salt structures, as compared to depleted oil and gas reservoirs. This also allows for high injection rates and withdrawal cycles, leading to higher techno-economic feasibility of salt caverns (Caglayan et al., 2020). Following these findings, Caglayan et al. (2020) found that the Netherlands has the second largest salt cavern potential in Europe, with Germany being first. The Netherlands and Germany lie within the Permian Zechstein Group, a large sedimentary deposit formed around 275 million years ago in northern-western Europe (Zhang, Krause, Mutti, 2013). Studies conducted by TNO (Detz, Weeda, Stralen, 2020) and Juaz-Larré (2019) further analyzed the Dutch potential of UHS-s. Across both studies, a potential 321 salt caverns were identified, with a total energy content of 43 TWh suitable for UHS-s (Detz et al., 2020; Juaz-Larré, 2019)

The HyWay 27 research by Tezel et al. (2021) is an extensive report covering the scope of the Dutch hydrogen backbone that spans three workstreams. First, a focus is put on hydrogen demand, supply, and storage. Then on the legal and financial aspects of the creation of nationwide infrastructure. Lastly, the technology needed and safety requirements are covered. The report's central focus is on the technical, economic, and institutional feasibility of repurposing the current Dutch national gas grid into a hydrogen grid. Tezel et al. (2021) conclude that it is technically feasible to repurpose the existing gas grid and that it is the most cost-efficient option. To do so, government intervention regarding high-risk investments is required to achieve 2030 climate ambitions. The Netherlands aims to become a hydrogen hub for the rest of Europe, in which the backbone can support a transmission capacity of 15 GW at an operating pressure of 50 bar (Gasunie, 2020). Tezel et al. (2021) highlight the need for UHS capacity within the grid to support such transmission capacity and efficiently connect supply and demand. Building on the report of Juez-Larré et al. (2019) and Detz et al. (2020), UHS-s are the perfect suitor for this capacity. Tezel et al. (2021) suggest that 6 TWh of storage capacity should be installed by 2030. Following the IP2022 climate scenarios, this amounts to six to twelve operational caverns. Juaz-Larré et al. suggest that the current construction capacity lies at two to three salt caverns per year.

### 1.3 Value perception

The literature indicates a clear link to UHS-s possibilities within the role of the Netherlands as a hydrogen hub. Techno-economic feasibility of creating 6 TWh of storage by 2030 is adequately recognized. However, to succeed, socio-technical feasibility is also needed. Most of the UHS-s potential lies in the northern Netherlands, a region where subsurface energy projects are a sensitive subject. Most prominently, gas extraction in Groningen has been the subject of national debate, where structural mismanagement of cost and benefit led to politically backed local resistance (Van der Voort, Vanclay, 2015). Another example is the case of the Dutch shale gas debate. Where insufficient communication led to local safety concerns, which grew to the formation of national anti-shale gas groups, ultimately locking up the entire sector. Dignum, Pesch & Correljé (2015) analyzed the debate and concluded that it is subject to an imbalance of values as perceived by actors along different frames of reference. Dignum et al. (2015) suggest that to understand such a debate fully, we need to consider the different conceptions of specific values. The analysis further establishes how the continuous misalignment of actor perspectives on values can further damage actor relations. In the case of the Dutch shale gas debate, when local issues were addressed, they were rooted in a different argument or a different interpretation of the same value, evoking a feeling of being unheard in the debate by local actors (Dignum et al., 2015). Another example of this misalignment of actor perspectives is discussed in the research of Geukes, Pesch, Correljé & Taebi (2021). It was found that the misalignment of the concept of a 'healthy' North Sea created a feeling of isolation among the fishing sector, causing them to leave the consultation

process and not support the North Sea agreement. Following these findings, it may be concluded that an aligned perception of values in a debate is essential for all actors' acceptance of the decision-making process.

Over the decade, social acceptance has become more critical for the successful implementation of energy projects. When local perception of values is not considered during decision-making, local resistance potentially grows and halts the project and even the entire sector (Dignum et al., 2015; Geukes et al., 2021). With the new Surroundings Act to be installed in 2023, participation of local actors must be guaranteed with every substrate subject. The Surroundings Act creates a new power balance, where local actors will gain more influence during the decision-making process (Winters, Van Popering-Verkerk & Duijn, 2020). Within the decision-making process, an imbalance in the perception of values among actors could lead to a misaligned process where actors feel left out (Geukes et al., 2020). Therefore, this perception must be aligned to create common grounds for social acceptance.

#### 1.4 Main research question

Social acceptance is a factor that might pose significant problems for the construction of UHS-s and the success of the IP2022 scenario. To succeed, UHS-s projects must internalize local actors into the decision-making process and design an institutionally grounded procedure to construct UHS-s on a widespread basis. This research aims to broaden the goal of the report of Tezel et al. (2021) by considering beyond pure technical feasibility and extending into the socio-technical feasibility of this scenario. This research will further explore the technical and institutional systems involved in constructing a UHS-s system by gaining more knowledge about the technical components, relating them to the broader institutional system UHS-s adhere to, and gaining a deeper understanding of actor interplay. The focus of this study, how to gain social acceptance within relevant regions, follows from the technical and institutional systems. To explore the social context of UHS-s, a paper by Winters et al. (2020) form the basis. Their report has created a basis for understanding societal embeddedness in LSES by providing an in-depth analysis of the participation process. A framework is operationalized through literature research on the relevant technical and institutional systems. Following the research of van de Poel (2013), Dignum et al. (2015), and Gioia, Corley & Hamilton (2013), this framework allows this research to conceptualize social acceptance into a set of value dimensions. These value dimensions may be extracted from public debate on UHS-s potential following semi-structured interviews. Ultimately enabling us to be able to answer the following Main Research Question (MRQ):

*What value dimensions are considered by actors for an inclusive decision-making process to realize underground hydrogen storage in salt caverns?*

## Chapter 2.

### Methodology

In this chapter, the relevant methodologies of this research will be formulated. Section 2.1 explains why a specific research approach is chosen. After that, to structure this research constructively answer to the MRQ, multiple sub-research questions (SRQs) are formulated and explained in section 2.2. Next, the methods used to answer the SRQs will be highlighted in section 2.3. Finally, the research is outlined and visualized using in section 2.4

#### 2.1 Research Approach

To answer the research question, an appropriate research approach must be formulated. This research takes an open approach, as no single research approach seems to be a perfect fit. Therefore, it is not wise to fully adopt a pre-determined research approach. The research will follow a pre-determined approach to structure the exploration phase but will not confine itself to a single framework in later stages. Nonetheless, the research most prominently follows along the lines of a *design approach*. A design approach is inductive and focuses on filling a void in a socio-technical system. According to Ubacht (2021), the objective is to create a design as a process, artifact, or framework to improve the system's functioning. Within this research, the aim is to establish firm grounds for the analysis of the deliberation of Dutch UHS-s projects. Therefore, it can be concluded that the design resulting from the design approach will facilitate the establishment of this socio-technical feasibility. Consequently, the designed framework will provide a structured basis for analysis of the decision-making process of involved actors for UHS-s projects. Finally, the data analysis structured by the framework will answer the main research questions and form the basis for the recommendations. Multiple scientific papers with similar objectives or matching elements within their research also utilize a design approach. For example, Blanco & Faaij (2018) used a design approach to create a multi-sided framework to assess an array of hydrogen storage options in a pre-set system. The framework internalizes the system intervention and creates the best solution. On the other hand, Saffers & Molkov (2014) designed a hydrogen safety engineering framework. It provides a structured elementary process design for carrying out hydrogen safety engineering. The framework is assessed by conducting several accident scenarios in which the tool is applied. The main advantage of the design research approach is that the primary focus is to develop a deep and practical understanding of the design process to create an effective system intervention (Johannesson & Perjons, 2014). This research also focuses on gaining a deeper understanding of the decision-making process. Johannesson & Perjons (2014) state that extensive knowledge about individual artifacts must be acquired to effectively apply a design approach, which can be time-consuming. A design approach creates a broad understanding of the technical, institutional, and process artifact and their significant interrelations, allowing for internalizing all relevant stakeholders into the given process. Ruhi & Akhigbe (2016) found in their research that a common pitfall is creating an overly complex framework and process in which the implementation timeframe becomes too vast. It is therefore advised to consistently scope your research when taking a design approach.



## 2.2 Sub-research Questions

To answer the main research question (MRQ) in a structured manner, a set of sub-Research Questions (SRQ) are formulated. The SRQs will be formulated consequential so that the deliverable of one will follow into the next SRQ. The formulation will be done according to the four phases of a design research approach defined by Johanneson & Perjons (2014). The SRQs and the corresponding phase, followed by a brief explanation, are given in Table 1.

<b>Sub Research Question</b>	<b>Design Phase &amp; Explanation</b>
<b>SRQ 1</b> What is the scope of the problem and what are the underlying forces that influence the potential of UHS-s?	<b>Explicate Problem</b> The initial problem must be investigated and analyzed to create a deep understanding of its nature. Ultimately explicating the problem so it can be precisely formulated and approached. Key is to maintain a broad scope to ensure the whole problem is considered.
<b>SRQ 2</b> What are the technical and institutional settings and how do these relate to the playing field of involved actors in consideration to the decision-making process?	<b>Define Requirements</b> Elaborate research is required to identify important aspects of the complex socio-technical setting. Most importantly, technical and institutional boundaries must be identified. Following this, actor roles and interrelations must be formulated to create a realistic outset of the decision-making process.
<b>SRQ 3</b> Can a theoretical framework be developed that is capable of capturing value dimension whilst ensuring traceability of individual actor opinion in the UHS-s debate?	<b>Design &amp; Develop Artefact</b> Values dimensions are dynamic and consist of several layers. How values are conceptualized and then develop over time may differ greatly in distinct settings. To create a robust artefact, the operationalization of the sets of values throughout a decision-making process must be examined. A frame of reference and conceptual theories could form a theoretical framework to structure value conceptions from source to final dimension
<b>SRQ 4</b> How can a complete picture of the UHS-s debate in terms of actor relations and (un)nuanced opinions of the decision-making process be captured in this research?	<b>Demonstrate Artefact</b> To capture the value dimensions, the UHS-s debate must be exposed. Proportional to their role, actors must be heard on all relevant aspects of the decision-making process. Arguments put forth must be identified and structured by the theoretical of this research.
<b>SRQ 5</b> What are decisive value dimensions for participation in the UHS-s debate, and what specifications of observed value dimensions conflict or strengthen each other in this process?	<b>Evaluate artefact</b> Through the theoretical framework, arguments put forth by the actors must be identified towards a set of value dimensions that directly relate to stronger actor participation during the decision-making process. The framework must also allow for the identification of potential conflicts between actors and value dimensions. A value analysis pinpoints where key values must align in configuration and operationalize to create the best value-balance to consider for actors before and during the decision-making process

Table 1: Sub-Research Questions (SRQ) with the corresponding explanation

## 2.3 Research Methods

To answer the research questions and create a consistent research approach, a set of research methods will be used within the different phases of the research. In this section, the chosen research methods will be elaborated upon and linked to the input of varying SRQs.

### 2.3.1 Literature research

Literature research will answer SRQ1, SQR 2, and SQ3. The introduction already touches upon the complex socio-technical system that is the hydrogen backbone and the potential of UHS-s. However, more detailed literature research must be conducted to understand relevant actor roles within the system. A literature review provides an up-to-date and well-structured overview of pertinent literature. It forms a basis for a better understanding of the complex socio-technical setting of UHS-s. The rationale behind conducting a literature review is based on two aspects. First, by answering *SRQ1* and *SRQ2* through extensive literature analysis, substantial knowledge is offered to the researcher in the research fields (Earley, 2014). This offers practical insights and allows the researcher to position their selves in the UHS-s debate to coordinate and conduct interviews more thoroughly. Having a good picture of the UHS-s playing field is essential to contact the right actors for interviews and conduct more thorough interviews. Secondly, to answer *SRQ3*, a theoretical framework is created that must be embedded in literature (Earley, 2014). Sound conceptual theories must be uncovered to structure the framework and the remainder of this research.

### 2.3.2 Semi-Structured Interviews

Semi-structured interviews will be held to demonstrate the Value Analysis Framework and answer SRQ4 and SRQ5. The interviews will be held to characterize the value dimension via the arguments of interviewed actors. Semi-structured refers to the intermediate form between strictly structured interviews with closed questions and open questioning without any consistency or guidance (Leech, 2002). The semi-structured interview formulates a prepared set of open questions that are the same in each interview but also leaves room for elaborating upon specific topics. It is deemed the superior form of interviewing for data collection within qualitative research. The reason is that besides keeping a consistent format throughout the interview, which is essential for gaining accurate results, it also allows for adaptability and diving into potential new topics (Leech, 2002).

### 2.3.3 Open-Source Coding

The semi-structured interviews are transcribed into text files and analyzed using an open-source coding scheme. Using such a scheme, a structured qualitative analysis is formulated. ATLAS.ti is used, a qualitative data analysis and research software to conduct the open-source coding. ATLAS.ti allows to arrange and manage the interview material systematically, making it possible to uncover the hidden actor values in a systematic format. The program provides a wide range of tools for locating, coding, and annotating findings from primary data material. Ultimately the software can weigh and evaluate the importance of codes and, by doing so, visualize complex relations between them (Friese, Ringmayr, 2013). Due to these characteristics, ATLAS.ti is the perfect open-source coding software for this research. The complex socio-technical setting

of this research potentially holds lots of complex relations that can only be uncovered using a systematic coding software such as ATLAS.ti

## 2.4 Research Set-up

Figure 1 depicts the research flow diagram that visualizes the research design. Each block represents a different phase of the research. Within the blocks are the related research questions and the associated chapters. The required input data and corresponding methods for each phase are listed on the figure's right-hand side. Using the abovementioned research methods and answering the SRQs, a comprehensive picture of the UHS-s decision-making and participation processes can be sketched. Ultimately allowing to answer the MRQ of this research accurately.

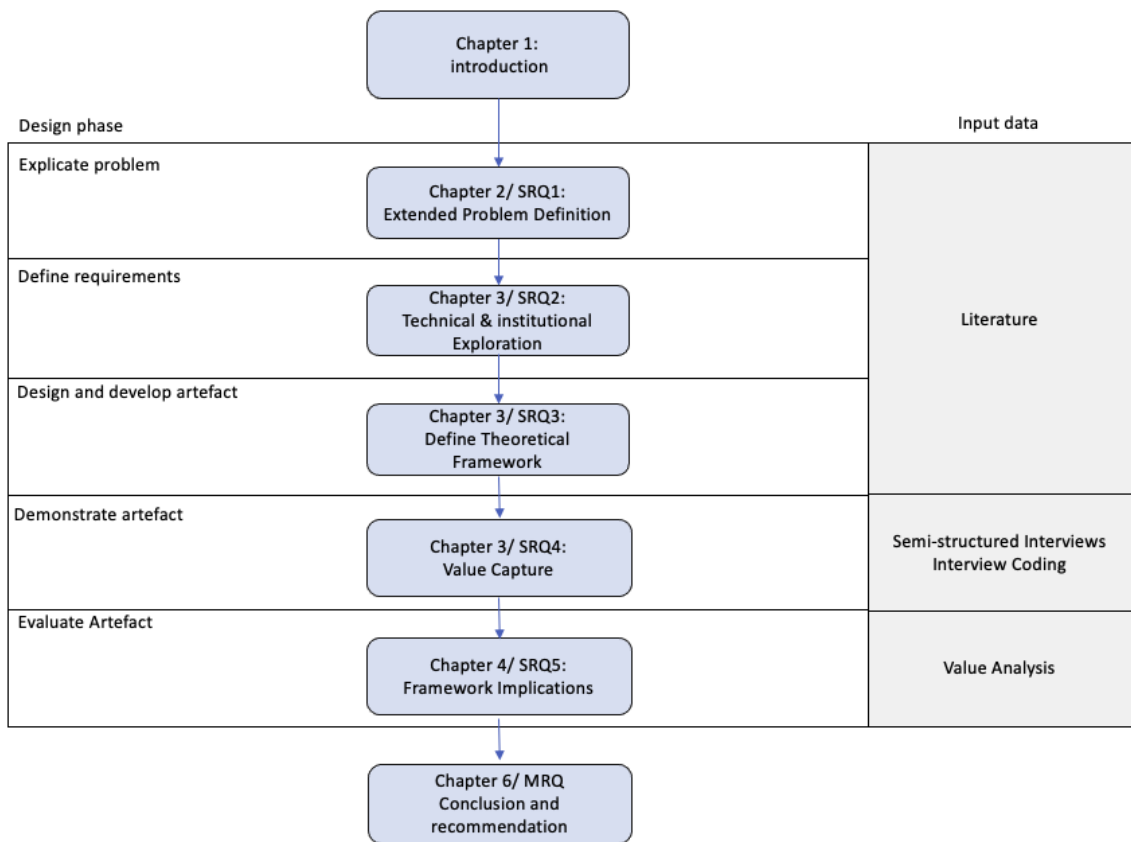


Figure 1: Research flow diagram visualizing how each chapter relates to the research design and corresponding SRQs

## Chapter 3.

### Analysis Framework

The analysis framework of this research will propose the set-up for data collection and data analysis of this research. This consists of two stages of data collection; a preliminary stage will explore the UHS-s environment by conducting an extensive literature review. The outcome of this stage creates a framework for value analysis in which theories are proposed to capture value in the primary data collection stage. The main data collection stage consists of semi-structured interviews. The interviewee selection, interview set-up, and interview analysis setup are also discussed in this chapter.

### 3.1 Literature Research

This research will conduct extensive literature research to explore the UHS-s environment, perform a force field analysis and create a level playing field for involved actors. The literature research will analyze the UHS-s system by exploring and connecting the different settings it adheres to. First, a technical exploration will be conducted, comparing natural gas storage systems to review the state-of-the-art UHS-s projects. Next, an institutional exploration considers relevant laws that influence the system. From this law, pertinent actors of the UHS-s system will be identified. Finally, a value analysis framework is developed, where relevant theories will be linked to the technical and institutional systems that correctly formulate the complex socio-technical setting of UHS-s. This creates a frame of reference for this research while also conceptualizing how this research can capture value dimensions from interviews.

#### 3.1.1 Technical Exploration

This chapter will focus on exploring relevant aspects of the technical system of UHS-S to create a base for understanding stakeholder interplay, claims, and values. A complete technological understanding of UHS-s is not needed because extensive research has already been dedicated to the technical feasibility of UHS-s. As the timeframe of this research does not allow for such exploration, it will be assumed that established beliefs in the scientific community are valid. This chapter will develop a joint base for understanding UHS-S by first exploring the different forms of gas storage. Next, relevant parameters for successful UGS are included, and a comparison between natural gas and hydrogen storage is made. To further quantify, the real-world application of UHS-S is discussed. Ultimately, UHS-s applications in the Netherlands and the Dutch hydrogen backbone are analyzed.

##### *3.1.1.1 Forms of Gas Storage*

Natural gas, unlike electricity, is a commodity that can be stored without degrading over time, making it an excellent candidate for energy storage (Di Sante, Castelnovo & Rubino, 2021). According to Di Sante et al. (2021), widespread natural gas storage comes in three different forms, each serving different timeframes. *Linepack* is the amount of natural gas stored within the transmission grid of a network. *Transmission system operators* (TSOs) use linepack as a daily flexibility tool to balance the grid by changing pipeline pressures to match supply and demand. *Regasification terminals* allow for Liquefied natural gas (LNG) storage and play a vital role within the LNG value chain by forming the interface between LNG carriers and the local gas supply infrastructure. Regasification terminals are a strategic means for weekly and monthly balancing of the

grid. Finally, UGS consists of storing large amounts of natural gas in handmade or, more commonly, natural structures. UGS responds to the need for longtime storage of vast quantities of gas for both technical and strategic purposes. As natural gas demand is characterized by daily and seasonal variations depending on local temperature changes, gas storage in the forms mentioned above helps satisfy these easily predictable demand cycles and shave peak demands during winter times (Di Sante & Rubino, 2021), creating an essential technical feature in the world's natural gas markets. A unique purpose of UGS is that it is a strategic reserve in case of unexpected events in demand or supply. Such events include supply disruption, geopolitical events, or extended periods of unforeseen weather conditions. The UGS reserves enhance a country's supply security and mitigate price volatility in reaction to these unexpected events. According to the *International Gas Union* (IGU), the total working gas volume in the world amounts to more than 423 billion cubic meters (bcm) (Tichler & Bauer, 2016), distributed over a total of 688 facilities and accounting for 11 percent of the global gas demand. The strategic aspect of having a reserve in times of uncertainty makes UGS particularly interesting to global powers. This makes it so that a few countries dominate the market. By 2017, the United States, Russia, Ukraine, Canada, and Germany accounted for 70 percent of the worldwide UGS capacity (Bai et al., 2018). Judd & Pinchbeck (2019) state that more than two-thirds of sites are in North America, with 414 in the United States and 59 in Canada. Europe is ranked second with 144 facilities, followed by the Commonwealth of Independent States with 51 facilities and Asia having 18 sites.

Taking a closer look at types of UGS applications in natural structures, the commercial operation consists of storage in *depleted gas or oil reservoirs* (UGS-r), of which gas reservoirs are preferred as they are more leakproof, or *salt caverns* (UGS-s). Handmade UGS has no commercial purpose and will not be considered within this research. Judd & Pinchbeck (2019) state that the most widely applied form is UGS-r, representing 74 percent of the total sites. It predominates due to its existing infrastructure and can store the most significant gas volumes. It also has low withdrawal rates and long injection cycles. These characteristics make it most helpful in balancing seasonal storage swings. UGS-s account for the rest of the sites worldwide and provide much higher withdrawal and injection rates. UGS-s requires the development of a cavern within a salt dome formation by using special procedures during the salt extraction process. This translates to a more costly extraction process as compared to UGS-r development. However, the ability to perform several withdrawal and injection cycles per year makes UGS-s much more flexible than UGS-r and thus a desirable form of UGS. UGS-s account for roughly 30 percent in Europe, while North America only accounts for 10 percent of the total UGS utilization (Judd & Pinchbeck, 2019).

### 3.1.1.2 Relevant Parameters

*Withdrawal and injection rates* strongly depend on factors that vary between UGS applications and reservoir or cavern structure. Reservoir rock is a porous formation that has been naturally fractured, forming high conductive flow paths between interconnected pores that provide storage capabilities. The permeability of this rock formation determines gas flow withdrawal and injection rates. Within caverns, the withdrawal and injection rates are limited by the *pressure-time gradient*, Bunger et al. (2016) found a typical maximum value is 1 MPa/day. Exceeding this value may damage the structural integrity of the cavern walls due to thermo-mechanical stress. Apart from structural conditions, the injectivity also varies with the prevailing condition and quantity of stored gas and several other factors, including the driving mechanism of the storage (such as water); the rock compressibility; the arrangement of the wells into storage; and the effectiveness of the surface gas handling facilities. Besides withdrawal and injection rates, important metrics of UGS are the working and cushion gas levels. The total volume of stored gas is divided into working gas, the maximum volume of gas available for withdrawal, and cushion gas, which is the volume of gas intended as permanent inventory to maintain adequate pressure and deliverability rates. Typically, UGS-r allows a maximum of 50 percent of the total volume to be available as working gas due to a significant amount of water and inflexibility. This results in one or two injection cycles per year with up to 150 days of withdrawal periods

(Civan, 2004). UGS-s, on the other hand, generally allow up to 75 percent of the total volume to be working gas and can complete several withdrawal cycles per year. The abovementioned metrics form a basis for UGS activity and can be measured to quantify successful operations (Bai et al., 2018). Essentially, different configurations of these metrics contribute to operationalizing three critical values: technical safety, maximization of storage, and minimization of costs.

### *3.1.1.3 Comparison of Properties*

Until recent years, large-scale UGS had only been considered for natural gas storage. However, with the rise of hydrogen as the energy carrier of the future comes the need for storage, of which large-scale UGS seems to be the most economically viable option. Therefore, a large extent of recent literature in the field of hydrogen has been dedicated to the technical possibility of large-scale UHS-r and UHS-s. Melaina, Antiona & Penev (2013) state in their research that technical viability depends upon the properties and critical differences of hydrogen compared to natural gas. Looking at the chemical structure of the two gases, hydrogen is a pure element consisting of two bound hydrogen molecules. In contrast, natural gas or Methane is a compound of carbon and hydrogen. Therefore, upon combustion, Methane releases carbon while hydrogen does not. Because hydrogen is a much smaller molecule, the molecular weight of hydrogen is 8.5 times smaller than that of methane (Melaine et al., 2013). Because hydrogen is a much smaller molecule, the risk of leakage increases. Special consideration needs to be put into materials used during compressed hydrogen production, transmission, and distribution. This includes pipelines, valves, and storage units. The energy density of hydrogen is about 2.5 times larger than methane's, but because the molecule is 8.5 times smaller, it is less dense. According to Melaine et al. (2013), you need approximately three times the volume of hydrogen compared to methane to get the same amount of energy. Lastly, Melaine et al. (2013) discuss the flammability of hydrogen compared to methane. It is concluded that controlling hydrogen combustion is much more complex. This is since hydrogen burns at a higher flame temperature, has a higher flame speed, and has a wider flammability limit. Due to its different properties, hydrogen brings forth new considerations and hazards when used commercially and should be treated differently than natural gas.

The difference in properties of hydrogen compared to natural gas also creates differences in the operating conditions of UHS as compared to UGS. Reitenbach et al. (2015, p.14) state, 'The main factors affecting the capacity and efficiency of UGS are the density, compressibility and calorific value of storage gas.' Under storage pressure conditions, the density difference of hydrogen as compared to natural gas increases even further by 20 to 30 percent. As stated before, scientists consider UHS-s to be more suitable than UHS-r. Due to its crystalline structure, rock salt forms an impermeable barrier for liquids and gases when used as caprock in caverns (Reitenbach, 2015). This barrier is widely considered 'technically tight' for hydrogen, as first coined by Crotogino & Hamelmann (2007). UHS-r, on the other, is not considered 'technically tight' for hydrogen. The sealing capability of caprock extends only up to the so-called '*capillary threshold*.' Porous caprock is saturated using capillary water to seal gas beneath it, acting as a geological barrier up till this threshold. Once exceeded, water will drain, and the seal becomes permeable for gas. Various studies indicate that the capillary threshold for hydrogen is much lower than for carbon composites like methane (Liu et al., 2005; 2006; Reitenbach, 2015). This leaking potential makes depleted gas fields less desirable for hydrogen storage. UHS-s, on the other hand, is a proven storage technology already applied globally.

### *3.1.1.4. UHS-s Application*

UHS-s technology was first applied in 1972 in Teesside, alongside an industrial cluster on the east coast of the United Kingdom. The purpose was to provide a buffer for industrial feedstock demand for the industrial cluster. The site is the longest operating site worldwide and has a total capacity of 25 GWh (Hevin, 2019). According to Hevin (2019), the largest operating UHS-s sites are in Texas, the United States. The

Chevron Phillips Clemens Terminal has stored hydrogen in an old salt mine since 1980 and has a capacity of 45 GWh. In 2017 the largest UHS-s facility in the world was commissioned by Air Liquide in Beaumont, Texas. The facility has a total capacity of 90 GWh; this holds enough hydrogen to run a nearby large-scale steam methane reformer (SMR) unit for up to 30 days (Hevin, 2019). In addition, two recent pilot projects where UHS-r tests are taking place have been launched. Hychico in Argentina and Sun storage in Austria consists of mixed hydrogen storage in depleted gas fields. Caglayan et al. (2020) have researched the technical potential of hydrogen storage in continental Europe. According to his studies, Europe has a thermodynamically derived potential of 84.8 PWh offshore and onshore UHS-s, of which 7.3 PWh is viewed as high potential, as it is within 50 km of the coast. Germany has the highest national storage potential, which is observed to be a total of 35.6 PWh. However, Caglayan et al. (2020) deem that 9.45 PWh of this potential is easily accessible and thus helpful. Following Germany are the Netherlands and the United Kingdom, with 10.4 and 9.0 PWh of UHS-s, where in the case of both countries, approximately half the potential is onshore. The UHS-s potential of these countries directly correlates to the *European Permian Basin* (EPB), the largest sediment paleo basin in the world. It was formed during significant periods of salt deposition in central Europe in the Paleozoic and Mesozoic (Caglayan et al., 2020). At the margin of the EPB, bedded Zechstein salt deposits are thinned out and buried at depths shallower than 2000m. According to Caglayan et al. (2020), these Zechstein deposits are the reason for the sizeable UHS-s potential in Germany, the Netherlands, and the United Kingdom. Detz et al. (2020) and Juaz-Larré (2019) conducted a more detailed analysis of the Dutch potential in the Zechstein deposit. Within the study, only the most suitable caverns were selected. Caverns must comply with ABVO 224 mining regulations (LfG, 2008), lay at reachable depths, and provide enough volume to construct an adequate UHS-S site. Across both studies, a potential 321 salt caverns were identified, with a total energy content of 43 TWh suitable for UHS-S (Detz et al., 2020; Juaz-Larré, 2019). As seen in [Figure 2](#) and [Table 2](#), the largest potential of UHS-s resides in the four most northern provinces of the Netherlands, from here on referred to as '*the northern Netherlands*.' The northern Netherlands has 65 percent of the total onshore UHS-s potential.

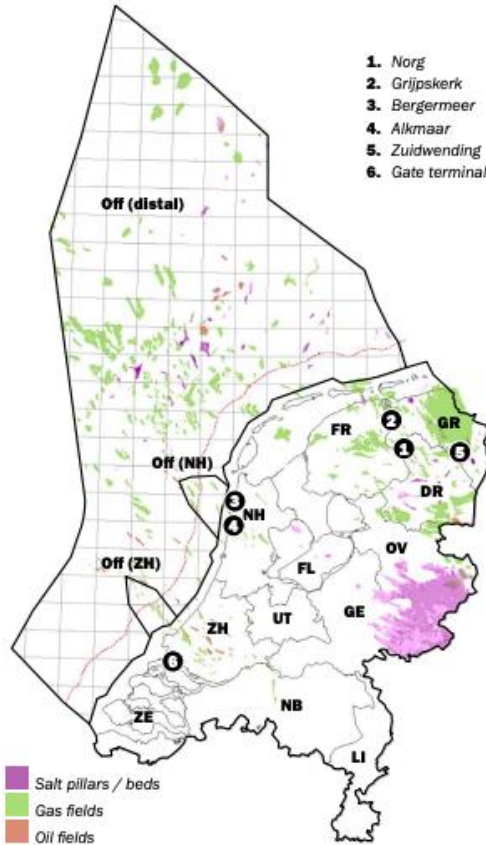


Figure 2: Demarcation of the Dutch provinces in which the contours of the gas/ oil fields, rock salt formations – potentially suitable for cavern development – and the current gas storage are also shown (Detz et al., 2020)

Province/ area	Energy Content (TWht)
Friesland (FR)	88
Groningen (GR)	31
Drenthe (DR)	51
Overijssel (OV)	10
North Holland (NH)	42
South Holland (SH)	56
Rest Onshore	0
<b>Total Onshore</b>	<b>277</b>

Table 2: Potential energy content of UHS-s across provinces of the Netherlands (Detz et al., 2020)

Because of the potential in the northern Netherlands, the first UHS-s pilot was launched in 2020 in Zuidwending by Hystock, a daughter company of Gasunie. Zuidwending lies in east Groningen in the municipality of Veendam. In the substrate of Zuidwending lies a salt dome where the Zechstein deposit rises from 2000-3000 meters depth to around 1000 meters depth (energiebufferzuidwending.nl, 2022). This salt dome has caused Noubian, a large chemical producer, to create around twenty caverns within the sediment over the years. Since 2005, Gasunie has started storing natural gas from the nearby Slochteren gas field as a buffer in six caverns. In 2020, Hystock has been tasked with creating the Netherlands' first UHS-s system. Hystock is planning on operating four caverns by 2030. Currently, Hystock is involved in permitting procedures while conducting preliminary tests on the first cavern. The first cavern is expected to be operational by 2026 (energiebufferzuidwending.nl, 2022). The caverns are intended to act as a buffer for the Dutch Hydrogen backbone, which is currently under development by Gasunie.



### 3.1.2 Institutional Exploration

The complex socio-technical system that UHS-s actors operate in conforms to a pre-determined institutional playing field. The playing field and its rules must be comprehended to understand this system. The institutional context determines the formal power configuration between actors. Analyzing this context is crucial to understanding stakeholder actions, reactions, and value operationalization. To do so, the research will first examine Williamson's four-layer model of transaction cost in institutional economics (1998) to establish the appropriate levels of analysis. Then, current institutional configurations like the *mijnbouwwet* and the *Rijkscoördinatiereregeling* are discussed. This is followed by consideration of the new *omgevingswet* and the corresponding *projectprocedure*. The two laws are then considered alongside each other, and their impact on each other and UHS-S is defined.

#### 3.1.2.1 Williamson Scheme

Williamson (1998) developed a framework for analysis that allows for the alignment between transactions in the institutional environment. The relevant institutional levels and transactions must be defined to define the institutional playing field of UHS-S accurately. The framework proposes four levels of social analysis, distinguished in [Figure 3](#), Ranging from slow-changing institutional arrangements like social norms in level one. To continuously change neo-classical economics to get the marginal conditions right in level four. This research coincides with level two and level three of the Williamson framework. Level 2 corresponds to 'the rules of the game,' meaning the institutional environment. It lays out the formal rules of the game that all economic activity is organized in, creating the laws and policies to which all players in the complex-socio system must adhere; Williamson refers to this as *first-order economizing* (Williamson, 1998). This chapter is dedicated to level two. It tries to analyze the institutional environment and understand the *rules of the game*. The next chapter and the remainder of this research will focus on level three, corresponding to the institution of governance. Having laid out the rules of the game in level two, level three focuses on the *play of the game*. Williamson referred to how to configure markets, firms, and organizations so that maximum output is achieved as *second-order economizing* (Williamson, 1998). Chapter four of this research will focus on stakeholder interplay to fully understand how the game is played.

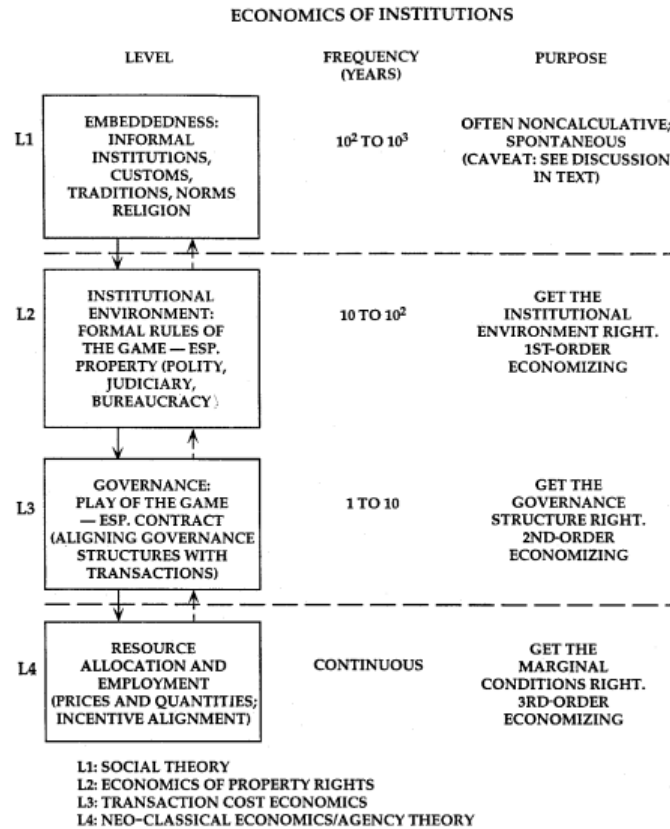


Figure 3: Williamson scheme highlighting the four levels of social analysis across institutions (Williamson, 1998)

### 3.1.2.2 Mijnbouwwet & Rijkscoördinatieregeling

The Zechstein deposit is, on average, situated at a depth between 2000 and 3000 meters. The licensing of activities in the deep subsurface, 100 meters and deeper, is regulated by the *Mijnbouwwet*, from here on, called Mining Act. Consequently, all UHS-s projects require the operating party to obtain a storage permit following the Mining Act [Article 10.9]. In the case of UHS-s, a cavern must first be created before storage is possible. Consequently, an extraction permit must be obtained beforehand. Another operator party potentially completes the extraction permit and procedure of making the cavern. When a storage permit is acquired, a concession to a pre-determined area is granted to the operator [Article 10]. Next, the operator must deliver a storage plan stating what operations will be conducted during the project's lifespan. The competent authority must approve this plan. Finally, potential environmental permits must be obtained for the project's area. Once the storage plan is approved by the competent authority regarding the potential environmental permits, the storage permit is granted [Article 11]. The competent authority for the storage permit is the ministry of EZK. Article 25 of the Mining act states that once a permit for storing substances in the deep subsurface is granted. The initiator has the sole right to store substances in the described area in the permit.

EZK maintains a standardized procedure called the Rijkscoördinatieregeling (RCR) to coordinate the decision-making of energy projects of national interest. The official site of EZK states that 'mining activity for storage of substances and associated pipelines' (rvo.nl, 2022) is always coordinated using the RCR procedure. The procedure consists of three formal steps with two reflective moments where actors can express their opinion. First the *Concept Notitie Reikwijdte en Detailniveau* (c-NRD) is a document describing

the goal in detail. It also includes potential alternatives and potential environmental effects. A c-NRD is only required when the RCR contains a Milieueffectenrapport (MER), which automatically is the next step. An MER is a report in which the environmental effects are mapped out. All alternatives are considered in a draft decision. Ultimately, EZK chooses the preferred alternative. Actors can express their views via a *zienswijze*, an official manner to react to a document on perusal. A *zienswijze* can be conveyed during the c-NRD and draft decision phases. At the end of the RCR, actors can also submit an appeal to the decision. Currently, all UHS-s permitting procedures follow the RCR.

### 3.1.2.3 *Omgevinswet & Projectprocedure*

In 2011 the Dutch government first announced its plans to create a new law called the *Omgevingswet*. From here, one is called the Surroundings Act. The Surroundings Act was introduced to simplify the system of legislation for the development and management of the living environment by effectively bundling dozens of laws and rules into one new law. The previous laws and rules encompassed spatial planning, housing, infrastructure, nature, and the environment (Roels et al., 2015). It is important to note that the Mining Act will not become part of the Surroundings Act. Bundling these laws and rules is difficult as over ten years later, parliament has still not fully decided on its contents. The Surroundings Act is expected to take effect on the first of January, 2023.

Most permits will remain the same, but most importantly, the Surroundings Act will introduce a new type of procedure. This procedure is called the *projectprocedure*; from here on called, the project procedure will replace the RCR. The biggest difference between these two procedures is that under the RCR, decisions to execute the development of UHS-s storage are coordinated by the competent authority of EZK. The project procedure aims to involve stakeholders at an early stage, preceding the project decision, by entering all actors into the procedure before the formal decision-making process begins (Winters, Van Popering-Verkerk, Duijn, 2020). The new procedure is designed to involve local actors and requires justification by EZK for the outset of a procedure and how it intends to do so. The Surrounding Act deliberately gives little guidance on how the participation procedure should be organized. This openness stimulates customizability for each project, allowing the participation procedure to be tailored to the actor playing field (Winters et al., 2020). The Surroundings Act does list other demands that must be fulfilled in the process. For one, every actor gets the opportunity to put forward a solution to the proposed spatial assignment. When a solution is put forward, it can be requested that EZK seeks advice from an independent expert. EZK then decides which alternatives that have been put forward shall be considered. For UHS-s, the competent authority and the project initiator agree on their roles in the process. The division of roles and the format of the participation procedure must be communicated to all third parties. However, no concrete indications on how this division or participation procedure should be organized are given. The perspective of little guidance aims to encourage parties to carefully think out the participation process instead of organizing a participation checklist (Roels et al., 2015).

### 3.1.2.4 *Comparison of Procedures*

The openness of the new project procedure offers much more possibilities to customize a procedure than the rigid three-step RCR procedure. It is customizable to the needs of a project and allows for a much more inclusive procedure. This openness follows a decentralized philosophy and puts the responsibility of participation in the hands of the organizer of the procedure. In the case of UHS-s, this is the initiator (Winters et al., 2020). The competent authority tests the adequacy of the level of participation in the procedure. The procedure has the potential to include the right actors and result in inclusive participation (Winters et al., 2020). However, the fact that no concrete guidelines are given might result in unclarity for initiators on what qualifies as a sufficient participation process [Article 17]. Van de Griff et al. (2017) frame three perspectives

on the organization of the participation process: cocreation, control by project management, and legal compliance [Article 19]. In the case of UHS-s, the open procedure might also give room for minimum legal compliance, control, and cocreation (Winters et al., 2020). This poses a risk that the interest of actors is not safeguarded sufficiently. Finally, the new requirement that everyone can propose a potential alternative to the spatial assignment in the exploration phase might pose a problem for UHS-s. UHS-s are restricted to production sites where salt extraction operations created these caverns. This geological dependence makes it very hard to propose a viable alternative solution and limits the space for discussion. This dependence makes it hard to fulfill this requirement as there is little room for actors to propose an alternative solution. Therefore, actors might be deceived at an early stage of the project.

### 3.1.2.5 Actor Analysis

This section will discuss all relevant actors in the UHS-s setting following the institutional setting. First and foremost is the *competent authority* for both the Mining Act and the Surroundings Act, which is the ministry of EZK. Both the Mining Act and Surroundings Act promptly discuss the role of the *initiator* party of a permit. This actor in the UHS-s translates to mining companies and operators in the Dutch energy system. Examples of such initiators are Noubian, TenneT, and Gasunie. As discussed in the previous section, the new project procedure focuses on integrating *local stakeholders* into the decision-making process by formulating a participation process. Local stakeholders are not fully defined in the Surroundings Acts, but this distinctively is aimed at the involvement of residents and businesses.

Chapter six of the Mining Act is titled advisors. In this chapter, all advising parties to the Mining Act are discussed. The most crucial advising party, the *Mijnraad*, is described in section 6.1, from here on called the Mining Council. The Mining Council is an independent advisory organ that directly advises the minister of EZK on granting and revoking all permits related to the Mining Act. The Mining Council advises tracking down or winning minerals or geothermal heat, and storing substances in the deep subsurface [Article 105]. The Mining Council consists of one chair and nine council members that the minister of EZK has independently appointed. Each member is appointed on the grounds of expertise in areas of interest in mining and mining-related activities [Article 106]. The Mining Council bases its advice on its own expertise but also on the advice of specialized *experts* in certain fields. For example, you have TNO as a geological expert, EBN as a financial expert, and the Tcbb for subsurface movement [Article 121]. Finally, in paragraph 6.3, the Mining Act characterizes the remaining advisors to the Mining Council. For regional and local aspects, this includes the involved *decentralized governments*, which are characterized as provinces, municipalities, and waterboards [Article 122]. Based on the Mining and Surroundings Acts, a list of the following actors in the UHS-s system can be characterized in Table 3.

<b>Actor</b>	<b>Organizational position</b>
Competent Authority	Initiator
Operators	Initiator
Mining Counsel	Expert
External Advisors	Expert
Decentralized Government	Participant
Local Stakeholders	Participant

Table 3: Actors in the UHS-s debate and their organizational positions.

### 3.1.3 Value Analysis Framework

This section will present a framework that may be used to capture value dimensions when analyzing the interviews. The framework is created by combining and operationalizing proven theories from previous research. This research can more accurately analyze value conception by combining this set of theories in a framework. The framework cannot be classified as a theoretical framework as it does not introduce new theoretical insights. It simply displays an operationalized reproduction of the given theories and directly applies them as an analysis tool. The framework consists of two parts, the frame of reference and the conceptual theories. To clarify, the frame of reference and conceptual theories operate alongside each other in which both fulfill their own task but do not necessarily interact with each other.

#### 3.1.3.1 Frame of Reference

The frame of reference of this research consists of two frames, the actor position and the spatial orientation. How each category per frame of reference is characterized is summarized in Table 4. There are three potential actors' positions: *expert*, *initiator*, and *participant*. Each actor and corresponding arguments can be placed alongside this frame of reference based on the organizational position within the UHS-s debate. For example, Hystock, the operator of the UHS-s pilot in Zuidwending, has a clear organizational position as an initiator. All arguments that might come forth in the interviews from someone representing Hystock will be classified as initiator arguments. The frame of spatial orientation refers to the context of an argument in terms of what implication it has. This research distinguishes four spatial orientations: *National*, *regional*, *local* and *non-spatial*. It might be hard to distinguish regional and local scales as, in reality the border between the two scales is unclear. The reason is that implications on the regional scale will most likely also have a local impact and local opinions are likely to be shared with neighboring regions. This research believes distinguishing between the two is necessary to capture nuances within a larger region. For example, the province of Groningen, a critical region within this research, has lots of distinct communities with different experiences of energy projects while also having a regional attitude towards initiator actors. Such nuance would be lost if regional and local scales were not separated. To make a clear distinction between the two spatial scales, this research categorizes local as impressions based on a specific community, small-scale actor, or project. An example of such an impression is, 'Consequently, you burden an individual operation with immense political pressure.' In this research, regional impressions are aimed at a lower scale but do not imply a specific community, small-scale actor, or project. An example of such an impression is 'Responsibility for arranging participation is not shaped, as it belongs in the areas of involved authorities. This example does mention the lower spatial scale but does not target a specific community.

Frame of reference	Definition
<b>Actor positions</b>	
Expert	Researchers with credibility in the form of relevant publications in associated fields and with no vested interest in any system outcome.
Initiator	Part of an organization that is involved in setting up, testing and acquiring licenses for mining and other substrate activity
Participant	Part of an organization that gets introduced into the debate as the associated activity unfolds
<b>Spatial orientation</b>	
National	Impression and potential implications that prove most significant on a national scale.
Regional	Impression and potential implications that prove most significant on a regional scale.
Local	Impression and potential implications that prove most significant on a local scale.
Non-Spatial	Impression and potential implications that cannot be associated with a spatial scale.

Table 4: Frames of reference consisting of two axes, actor position, and spatial orientation, followed by definition

### 3.1.3.2 Conceptual Theories

The conceptual theories of this framework have all been selected for a distinct reason. All three theories are a tool to establish the conception of values in this research. By using these theories, boundaries for value conception are set, creating a form of reproducibility for other researchers. Reproducibility, in its turn, creates a stronger research out-set. In this paragraph, each conceptual theory is discussed. First, the reason for using the conceptual theory is given. This is extended by an explanation of the theory itself and how it is used within the designed framework and this research.

The *Gioia method* is used in this research because of two reasons. First and foremost, this research will try to identify value dimensions from transcribed interviews. This means that one interview, on average, consists of fifteen pages of text. A structured analysis tool must be used to make sense of such large text files. The Gioia method is a systematic methodology for qualitative research and is widely viewed as one of the most effective methods (Gioia, 2021). It uses open-source coding, which captures common dimensions from large pieces of text via phrases and aggregates them into single words. In other words, the tool is a structured manner to identify sentences from our interviewees that consist of certain opinions and consequently pool those opinions into values.

The *Gioia Method* is a form of open-source coding. Open-source coding develops substantial codes by describing, naming, or classifying the phenomenon in a stepwise manner. It segments data into meaningful expressions, ultimately describing them in a single word or short sequence (Gioia et al., 2013). The coding scheme establishes high traceability from a final theme back to a single phrase in the raw data sources. This traceability ensures that minimal nuances and implications are lost in the coding process. To highlight the stepwise process an example will be taken from the literature. Gioia et al. (2013) utilize an open-coding scheme in which a three-step process allocates a wide set of phrases to a theme. This process is highlighted in Figure 5 and was coined the Gioia structure (Gioia et al., 2013) The first step consists of labeling parts of raw text data in an open-source format and creating first-order concept phrases from them. The second step finds common themes between first-order phrases and groups them into second-order themes. The third step aggregates the second-order theme into a final overarching theme. Within his research, Gioia et al., (2013, p. 9) state that “The reader should be able to see the data-to-theory connections in the form of linkages among the quotes in the text, the first order codes in the data structure, and their connection to the emergent second order concepts/themes and dimensions.” This quote showcases the essence of the Gioia Method, focusing on creating an accurate structure that allows tracing final themes back to individual concepts, emphasizing the creation of new concepts and theories.

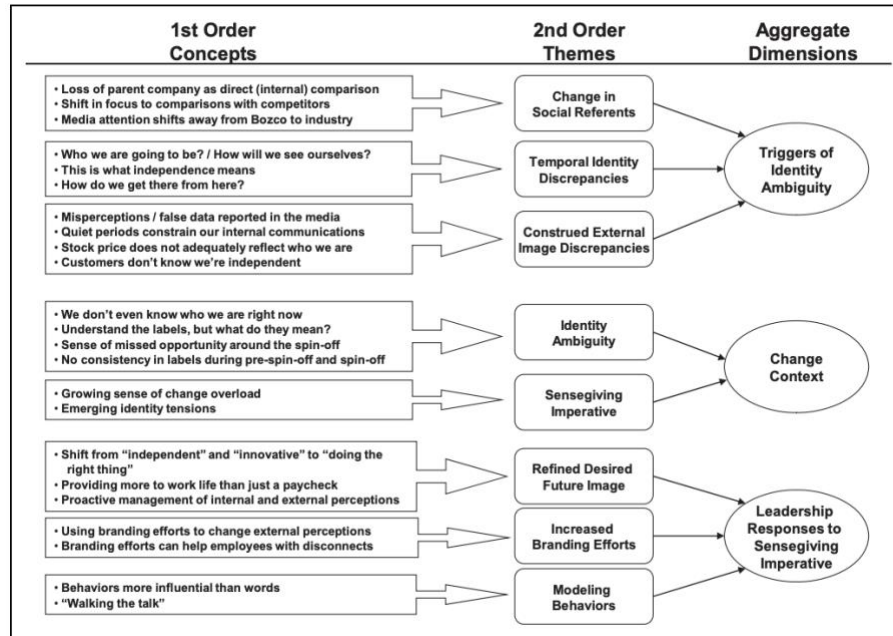


Figure 4: Visualization of the application of the Gioia method. First-order arguments relate to second-order themes, which get aggregated into a finite set of third-order dimensions (Gioia et al., 2013)

The *Adapted Value Hierarchy* was also chosen for its ability to conceive values. However, the focus lies much more in the philosophy than the actual structure of the method. The Adapted Value Hierarchy captures opinions from public debate and structures them into values using a pyramid structure. This research uses the notion of capturing arguments from public debate and structuring them into values. It applies this same concept to transcribed interviews.

The *Adapted Value Hierarchy* is a framework first conceptualized by van de Poel (2014). In his research, he created the concept of a 'Value Hierarchy.' The value hierarchy comprises three levels organized in a pyramid scheme. A limited number of value dimensions, such as safety or resource durability, reside at the top of this pyramid. The middle level is comprised of norms that are operationalized through actions supporting top-level values. Norms can be characterized as objectives, goals, and/ or constraints. Objectives are expressed without a specific target, such as 'maximize safety' or 'minimize costs. Goals, on the other hand, define an actual target. Constraints are actions that set boundaries or minimum conditions. Finally, the base of the pyramid consists of detailed design requirements. An important notion of the value hierarchy is that the top comprises a limited number of conceptual values. Movements down the pyramid operationalize the values into specific themes and concrete executions that are not necessarily recognizable but incorporate the value on a higher level. Dignum et al. (2016) examined the applicability of value-sensitive design in the context of public debate on shale gas exploration in the Netherlands design. In their research, Dignum et al. (2016, p. 11) state that "public debates mainly addressed the mid-level of norms. Norms can be made explicit and expressed in the form of arguments, which are put forward in public debate." "We then identify the values to which the arguments referred." Following this statement, Dignum et al. (2016) created the Adapted Value Hierarchy as shown in Figure 6. This research takes place in a similar context to that of Dignum et al. (2016). It is believed that arguments in the UHS-s debate could be explicated towards norms and then identified with a top-tier value dimension.

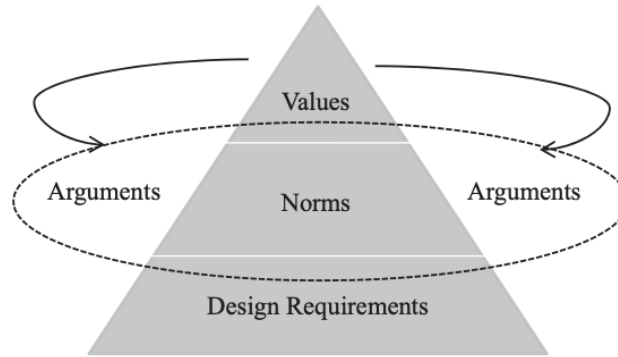


Figure 5: Adapted Value Hierarchy visualizing how the public debate, voiced in arguments, occurs around the middle level of norms. From these arguments, values can be characterized (Dignum et al., 2020)

Another reason for choosing the Gioia method alongside the Adapted Value hierarchy is that the format of the Gioia method aligns with the format of the *Adapted Value Hierarchy*. Both theories essentially use three dimensions to translate phrases in sentences into single-word theory. To clarify, the Gioia method discusses first-order concepts consisting of sentences. These are pooled into second-order themes and finally aggregated into third-order dimensions. The Adapted Value Hierarchy distinguishes arguments in the form of sentences that are translated into norms. Finally, these norms are arranged into values. These formats are very similar and therefore easily integrable with each other.

The final conceptual theory used in this research relates to the concept of *Value Conflicts*. Value conflicts, however, not used for the actual value conception, are important to understand the interplay between the conceived arguments, norms, and values. For further analysis, it is important to understand how the conception of some values impacts that of others and the corresponding actors.

This theory, first formulated by Dignum et al. (2015), states that conceptualized values in a public debate may cause two forms of conflict. *Intra-value conflicts* occur when a conceptualized value endorsed by different actors might still cause contestation because of the difference in operationalization and interpretation of these values among actors (Dignum, Pesch & Correlje, 2020). An example of such a conflict for the value of sustainability in the context of the Dutch energy mix: One actor operationalizes sustainability as only using non-carbon emitting energy forms. Another actor operationalizes sustainability as having a large and wide array of energy sources. *Inter-value conflicts* occur when the operationalization of one value is at the expense of another. An example in the context of the Dutch energy mix for the values of sustainability and energy security: The use of only non-carbon emitting energy forms limits the use of many energy sources, which directly opposes the notion of energy security. The concept of Intra-value and Inter-value conflicts is used in the data analysis of this research to uncover potential pitfalls of actor and value relations in the setting of UHS-s.

### 3.1.3.3 Interpretation

The final framework is visualized within this paragraph, as seen in Figure 6. A roadmap to interpreting the framework and the interplay between the two components is highlighted. Terminology going forward is established, and examples are used to showcase how values are conceived using the framework. The framework consists of two parts. The frame of reference operates as guidance throughout the interviews. It helps structure opinions in terms of which actor expressed that opinion and what that opinion entails on a spatial scale. Doing so gives important context to arguments and highlights the outset of certain actors. It also allows the research to ensure better objectivity by highlighting arguments across the entire frame of



reference. Next to the frame of reference, you have the conceptual theories. These theories facilitate value conception and act as analysis tools to conform individual arguments into a value dimension. Together the frame of reference and conceptual theories create a framework that can operationalize value dimensions from transcribed interviews while providing feedback on its origin.

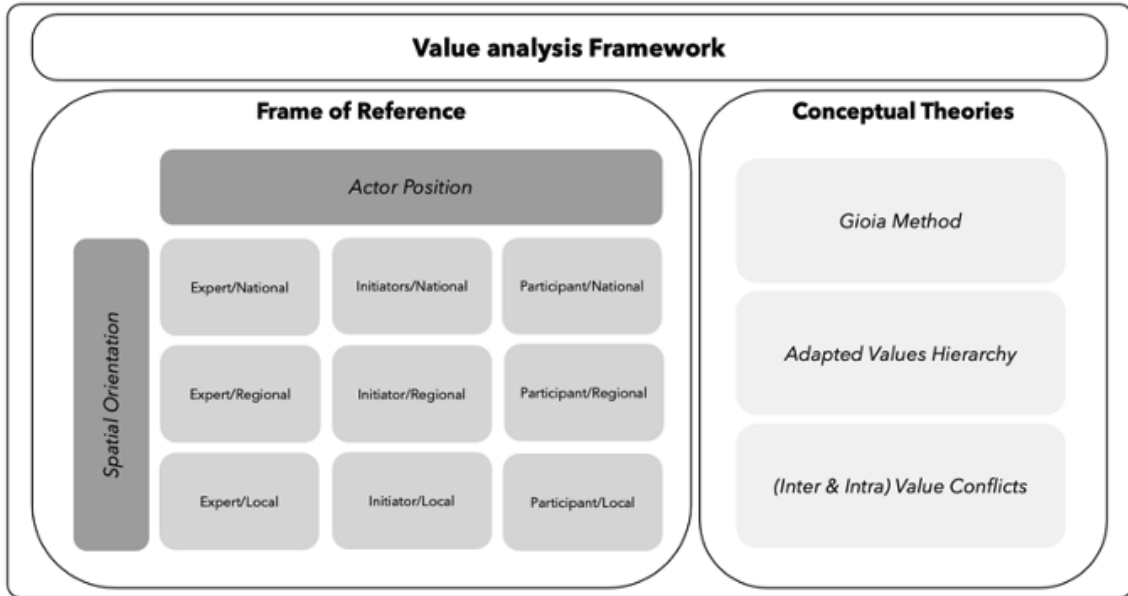


Figure 6: Value Analysis Framework proposed by this research containing the frame of reference and surrounding conceptual theories. The frame of reference proposes nine different potential dimensions for arguments to position themselves.

Operationalizing value conception, this research will utilize the *Adapted Value Hierarchy* alongside the *Gioia method* to capture and structure value dimensions from arguments put forward in the interviews. Because of the similar format, the two are easily integrable. This research essentially uses the open-source coding format of the Gioia method but extends it with the philosophy of the Adapted Value Hierarchy. Combining these theories, this research will extend the following terminology for the remainder of this research: ‘*first-order*’ arguments correspond to the first step of value conception, which is the initial recognition of an interviewee’s opinion. This will be highlighted as a first-order argument. For example, ‘*Quantification of safety in the form of money is an important aspect. If possible, it is the most important and best way to gain people’s trust.*’ is a clear opinion that can be classified as a first-order argument. Next, ‘*second-order*’ norms correspond to the second step of value conception and relate to a set of arguments that can be represented as a collective opinion held by several interviewees. For example, the above first-order argument can be related to the second-order norm of value creation as it is clearly linked to the notion of how to create value for certain system actors. Lastly, ‘*third-order*’ values correspond to the final step of value conception and relate to the aggregation of norms into a final value dimension. This value dimension is deemed an important dimension across the UHS-s debate. Following the above example, the second-order norm of value creation can be linked to the third-order value of distributive justice, as this norm aims to change the outcome of distributive justice in the system. The conceptual theory of *value conflicts* is a tool of analysis that can be used after the process of value conception has been completed. Having established relevant norms and values, the theory of value conflicts can be used to distinguish potential conflicts between relevant norms, values, and their corresponding actors. The value analysis framework distinguishes between first, second, and third-order components. To clarify, these components do not interact with each other on a different scale but entail the first, second, or third step in the value conception process.

## 3.2 Semi-structured Interviews

The primary source of data collection involved a pre-determined set of interviews with actors within the identified setting of the technical, and institutional system. This section first discusses the interview selection criteria and then elaborates upon the selection of each interviewee. Finally, the coding scheme during and after the interviews is defined.

### 3.2.1 Selection Criteria

A total of seventeen people were interviewed in one-hour-long sessions. These people were each carefully chosen on a basis of four criteria. The first criterium relates to the *organization* that each person represents. Each organization is identified as an actor within the system and is actively involved or has participated in relevant activities for this research, including but not limited to social embeddedness, LSES, UHS-s, or salt cavern storage in general. The second criterium is based on the *function of an individual within the organization*. Each person is personally involved in the complex socio-technical system and has a function that gives them responsibility and authority within the organization over the relevant subjects. The third criterium consists of the individual's organizational position as proposed by this research's frame of reference. The role of a person is determined by combining the scope of the organization's operations and the place of the individual within the organization. For example, two individuals with the same function from the same organization were interviewed. However, one was placed on a national scale due to his overseeing role, while the other was placed on a local scale due to his role within a given project and municipality. The fourth and final criterium relates to the *positions of the organization and individual* within the debate. According to the last three criteria, the person is labeled an expert, initiator, or participant. An expert is a researcher who publishes articles in the relevant fields and has no vested interest in a particular system outcome. An initiator is someone working for an organization involved in setting up, testing, and acquiring licenses for LSES activities. Finally, a participant is a person working for an organization that gets introduced into the debate as the associated (licensed) activity unfolds.

### 3.2.2 Interviewee Selection

The interviews consisted of seventeen semi-structured interviews with experts, initiators, and participants. The expert interviewees are researchers from TNO and GovernEUR who have published papers within the relevant fields. They are considered experts in LSES, energy law, and social embeddedness. Relevant publications include research on the legal and societal embeddedness of LSES, cogeneration of hydrogen, and the normative diversity of Shale gas in the Netherlands. Within these papers, suggestions on shortcomings of the 'omgevingswet' about LSES and societal embeddedness are made. Also, an analysis of societal conflict and controversy about sustainable transition is presented. The expert opinions confirm previous chapters' theory and further strengthen understanding of the complex socio-technical system. Initial opinions help gained from these interviews help set up questions and the general direction during the semi-structured interviews.

Various people across different organizations, functions, and positions have been interviewed for the remaining fourteen semi-structured interviews. The organizational positions follow the frame of reference identified in the previous paragraph. From an initiator's perspective, a total of six interviews were conducted. Three of these interviews were conducted with leading members of highly involved organizations. First, a board member of the competent authority of mining activities, the ministry of EZK, was interviewed. Also,

a member of the Mijnraad was interviewed, the direct advisory organ to the ministry of EZK on mining activities and licenses. Finally, an interview was conducted with the surroundings manager of Gasunie, the country's leading initiator in mining activities and owner of the Dutch hydrogen backbone. This individual is tasked with creating and managing the company's new policy surrounding the participation of the environment as required in the 'omgevingswet.' The remaining three interviews with initiators were conducted with the senior policy advisor to the Northern Netherlands of the ministry of EZK is responsible for several sustainable energy projects. Most prominently, wind farm N33, a project that experienced significant resistance from residents. He is also the EZK representative for the UHS-s project in Zuidwending. Next, the senior advisor for energy within the Northern Netherlands of the *Rijksdienst Voor Ondernemend Nederland* (RVO) is responsible for the organization's involvement in hydrogen projects within the region. The RVO is an agency of the Ministry of EZK and is tasked with supporting sustainable entrepreneurship on a regional scale. Finally, the surroundings manager of Hystock was interviewed, the daughter company of Gasunie that controls the salt caverns of Zuidwending. It is responsible for the current UGS-s and the expansion to UHS-s. The surroundings manager himself has the function of creating a participatory system and smooth operation within the local community.

The remainder of the interviews were conducted with participants consisting of governmental agencies, NGOs, and municipalities. First and foremost, the chair of the waterboard of Zuiderzeeland was interviewed, an area stretching three provinces. The interviewee has a dual function within the Mijnraad and the waterboard and is directly involved in LSES projects and the 'omgevingswet.'. Next, the director of the Hunze en Aa's waterboard is responsible for water management within the provinces of Groningen and Drenthe. The organization controls the area with the most considerable UHS potential in the Netherlands. Three interviews were conducted with active representatives of NGOs in the province of Groningen. Each represents the interest of residents of the province in a different matter. The *Natuur en Milieufederatie* (NMF) Groningen works closely with governmental agencies and companies to strive for a green and sustainable Groningen. Secondly, the *Groninger Gasberaad* (GGB) is the region's leading organization supporting residents in all gas extraction implications. It has a comprehensive sub-association platform and closely contacts governmental agencies, municipalities, and residents. Lastly, Stut-en-Steun is an independent organization founded by the GGB to support individuals in settlement claims for damages due to mining activity in Groningen. The remainder of the participant interviews were conducted with local municipalities. An interview with two senior policy advisors of the municipality of Enschede who were actively involved in a case where the storage of gasoil in salt caverns led to high tension between local municipalities of the region of Twente and national agencies. Another interview was conducted with a policy developer of the province of Overijssel, who was involved in the same case but from a different perspective. Together these individuals created a joint political lobby with other regional municipalities to gain more control over the substrate for decentralized governments. Lastly, an interview with a senior policy advisor of the municipality Veendam, the municipality that has jurisdiction over Zuidwending, shines a light on the case of Zuid wending from a local governmental perspective. An additional expert interview was conducted at the end to confirm beliefs and nuance strong opinions gained from the interviews. The individual has published several papers on inclusive surroundings management and has started an organization called Public Mediation. The organization provides responsive services in escalated situations and tries to restore the participation procedure with the environment. A summary of all individuals is given in [Table 7](#), which can be found in [Appendix A](#).

### 3.2.3 Interview Guide

To conduct the semi-structured interviews, an interview guide is created. An interview guide establishes a structure to ensure a complete interview in which relevant subjects are elaborated upon while maintaining a common direction. Doing so will establish objectivity and consistency throughout the interviews, allowing for more accurate coding of the interviews. The interview is split into an introduction, a middle section, and an ending to create the guide. Within each section, questions are formulated to aid a fluent interview process. The guide chooses relevant questions during the interview following the interviewee's expertise. This open format led to different interviews regarding the depth of specific themes while maintaining a shared topic pool. The interview guide for this research can be viewed in [Appendix B](#).

### 3.2.4 Coding Rounds

To facilitate the data collection phase, having established consent from each individual beforehand, an audio recording of each interview was taken. This allowed for undivided attention during the interview and ensured that no important messages would be lost. The audio recording was transcribed into text files. During the transcription, the first selection of important notes was made through highlighting text and placing comments in preparation for the next step, which was to code the raw data. The coding consists of two separate coding rounds. The first coding round concerns the actual value conception, while the second coding round adds the frame of reference to the codes established in the previous round.

The *first coding round* utilizes the conceptual theories of the value analysis framework as presented in the roadmap of *section 3.1.1.3*. To maintain nuances of words, phrases, and explanations of individuals in certain positions, it was opted to use an open-coding scheme for the first coding round. This resulted in combing the Gioia Method with the Adapted Value Hierarchy to create the value conception procedure as presented in the Value Analysis Framework of this research. Consequently, the first coding round coded first-order arguments, second-order norms, and third-order values from the transcribed interviews. It ultimately structures public opinion and uncovers absolute values from initial sentences and phrases while ensuring traceability from top to bottom. It is important to note that an objective assessment form for value conception is ensured by not regarding the phrase's origin.

For the *second coding round*, the coding scheme was extended by adding the frame of reference as presented in the Value Analysis Framework. This means that all first-order arguments created in the first coding round were coded into two separate groups according to the actor position and spatial orientation of that first-order argument. For the actor position, the codes are labeled as either an expert, initiator, or participant opinion based on which person in what organization produced the argument. For example, if an argument is expressed by someone in the directory of EZK, this argument is labeled as an initiator's opinion. The same was done for the spatial orientation, all first-order arguments were also assigned along the spatial axis based on how the argument was formulated and to what specific setting it entailed. The codes are labeled as either national, regional, local or non-spatial. For example, the first-order argument '*We explicitly said in parliament, keep your hands of how you fill in participation, or it becomes a checklist*' is assigned to the national spatial scale because of its direct link to the Dutch parliament, a national governing body.

### 3.2.5 Coding Software

To create the established scheme, ATLAS.ti was the coding software of choice. ATLAS.ti is a leading data analysis software that is predominately used for qualitative research. It allows for building well-structured code lists to systematically analyze complex phenomena hidden in unstructured text data (Friese & Ringmayr, 2013). The transcribed interviews were put in one large text file and uploaded to ATLAS.ti. The *In Vivo code* function was used to create the first-order arguments from the raw text to conduct the first coding round. This function allows you to select a part of the text and directly generate a code from it using the exact words. Next, to create the second-order norms, the *Code Group* function was applied. Each in vivo code was placed into a code group following a common norm. Finally, the code groups were aggregated into a new set of code groups to create the third-order values. The third-order value code groups contained all the separate first-order arguments that were also part of the different second-order norms. Each first-order argument was put along the theoretical frame of reference in the second coding round and placed in two new code groups: one for the actor position and another for the spatial scale. For example, the phrase ‘That national policy has not been plotted, it just isn’t there really’ was said by an expert talking on a national scale. Therefore, the code was placed into the code groups ‘expert’ and ‘national.’ Finally, the *Smart Code Group* function was used to link the first and second coding rounds and complete the coding scheme. The function allows you to search for first-order arguments placed in two or more selected code groups and then aggregate these into a new code group, creating a common base for analysis of the different dimensions.

## Chapter 4.

### Results

This analysis aims to provide complete coverage of the UHS-s debate as presented by the interviewees. First, general remarks on the conductance of the coding rounds will be given to showcase the objectivity of the research fields. Then, each identified value dimension and corresponding norms will be analyzed. Actor opinions will be discussed and quoted to create a coherent and nuanced story. Potential coherence and conflict will be considered before discussing the following value to validate general opinion and provide a structured overview.

#### 4.1 General Remarks

Within this section, the two coding rounds that were conducted in ATLAS.ti will be discussed. The first coding round revolved around creating the initial codes in the form of first-order arguments and clustering these into second-order norms and third-order values. The second coding round allocates the codes according to the proposed frame of reference. Finally, implications of how the arguments and values are spread alongside this theoretical frame of reference will be discussed.

##### 4.1.1. First Coding Round

Each code was created based on answers to structured questions or general remarks that expressed a clear opinion in favor or against an aspect of the UHS-s debate. Following the Adapted Value Hierarchy, the first step was to code these opinions into a first-order argument. Next, these arguments are grouped into second-order norms following the data-to-theory connections of the Gioia method. The identified second-order norms and a brief explanation are showcased in [Table 5](#). In total, ten significant second-order norms were identified among the first-order arguments. Norms were deemed significant when five separate first-order arguments could be identified with the norm. As showcased in [Figure 7](#), a total of 187 arguments were assigned to the ten different norms. *Communication*, *assessment framework*, and *surroundings code* were the most heavily opinionated norms among the interviewees. These norms acquired almost half of the total assigned arguments. While *frankness*, *governmental interest*, and *stacking activities received* the least attention during the interviews. Of the initial 252 first-order arguments, 65 could not be assigned to the identified norms, of which 31 arguments were assigned to a group labeled remainder. These consist of critical impressions of actors that should be considered to nuance opinions and better understand interplay. The

remaining 34 unassigned arguments were discarded for further analysis as these arguments were either out of context or expressed non-relevant opinions for the scope of this research.

<b>2<sup>nd</sup> order Norm</b>	<b>Definition</b>
Assessment Framework	Clear policies and norms providing a conceptual structure and referencing point for all actors
Governmental Interest	Inconsistent views over authority and jurisdiction of governmental agencies and departments
Surroundings code	Expressed opinions on the content and implications of the 'omgevingswet'
Cost-benefit consideration	General discussion on the spatial cost-benefit distribution
Value creation	Specific interpretations and propositions of frameworks to create value amongst actors
Stacking Activities	Expressed opinions on the regional distribution of projects with national interest
Communication	Impressions of the general communication amongst actors throughout the lifespan of projects
Frankness	The extent of sincerity, honesty and directness among actors' actions and reactions
Transparency	The extent of clarity and openness of actors' intentions and reasoning toward each other
(Dis)Trust	Degree of skepticism and expectations of actors towards other actors
Remainder	Widespread and critical actor opinions deemed of importance for drawing complete picture

Table 5: All second-order norms as characterized by the interviews

The next step was to conceptualize the third-order values of this research. The values that were recognized can be seen in Table 6. These values were deducted from Dignum et al. (2016) and can be identified as *procedural values*. Dignum et al. (2016) refer to procedural values in the case of distributive justice as “questions patterns of distribution of an important good or commodity.” Dignum et al. (2016) also distinguished *substantial values* in their research. In the case of distributive justice, it is identified as “focusing on the unit of distribution, i.e., what is the entity or unit of benefit, good or commodity that is to be distributed.” This research focuses on actor behavior and the inclusion of underrepresented actors in decision-making. By default, this research targets procedural values, aiming to uncover and operationalize them throughout the interviews. Due to this reason and for the sake of clarity, this analysis only extends to procedural values. It does not consider the potential that some identified second-order arguments could also be recognized as substantial values, as proposed in the research of Dignum et al. (2016).

<b>3<sup>rd</sup> order Value</b>	<b>Definition</b>
Responsibility	Control, authority and obligation based on political and legal power with a corresponding institutional framework (adapted from Dignum et al., 2016)
Distributive Justice	Fair distribution of cost, benefits and other positive and negative external effects, including both spatial and temporal distributive justice. Spatial refers to distribution of negative and positive consequences in a physical spatial sense. Temporal includes intergenerational issues like exploitation of resources (Dignum et al., 2016)
Procedural Justice	Transparency, honesty as well as timely, full and unbiased information throughout the life span of a project (adapted from Dignum et al., 2016)

Table 6: Final third-order value dimensions as characterized through the interviews

The values were conceptualized through the research of Dignum et al. (2016) as an impression of procedural values. The greater context of procedural values relates to the concept of *Energy Justice*. Energy Justice has emerged over the years as a new form of social science where justice principles are applied to energy policy and security Jenkins et al. (2016). As defined by Jenkins et al. (2016), the core principles of energy justice focus on distributional, recognition, and procedural tenets. Sovacool & Dworkin (2015) reviewed the conceptual insights and practical application of Energy Justice. The study details how Energy Justice serves as an important conceptual tool for social scientists to better integrate distinct distributive and procedural justice. It also serves as an analytical tool to understand how values get built into energy systems and act as decision-making tool that can assist energy planners in making more informed energy choices (Sovacool & Dworkin, 2015). Bouzarovski & Simcock (2017) introduce the term spatial justice spatial to conceptualize energy deprivation by framing a spatial lens and not merely focusing on social groups for the concept of Energy Justice. Energy Justice relates to the values of distributive justice and procedural justice in this research. Where distributive and procedural relate to two different aspects of an energy project where justice

must be installed. The two values closely relate to the conceptualization of Energy Justice in the abovementioned papers. This research acknowledges the broadened understanding of Energy Justice as sketched by Dignum et al. (2016), Jenkins et al. (2015), Sovacool & Dworkin (2015), and Bouzarovski & Simcock (2017). These conceptions will be considered for the aggregation of arguments and norms toward the values of distributive justice and procedural justice.

The second-order norms must be categorized amongst these values to finalize the first coding round of this research. Following the Gioia structure, the second-order norms have been aggregated, as seen in Figure 7. *Procedural justice* was the most dominantly discussed value, receiving 82 arguments, while distributive justice received half the number of arguments. *Responsibility* is situated in the middle and received 64 arguments. All first-order arguments can be found in Appendix C.

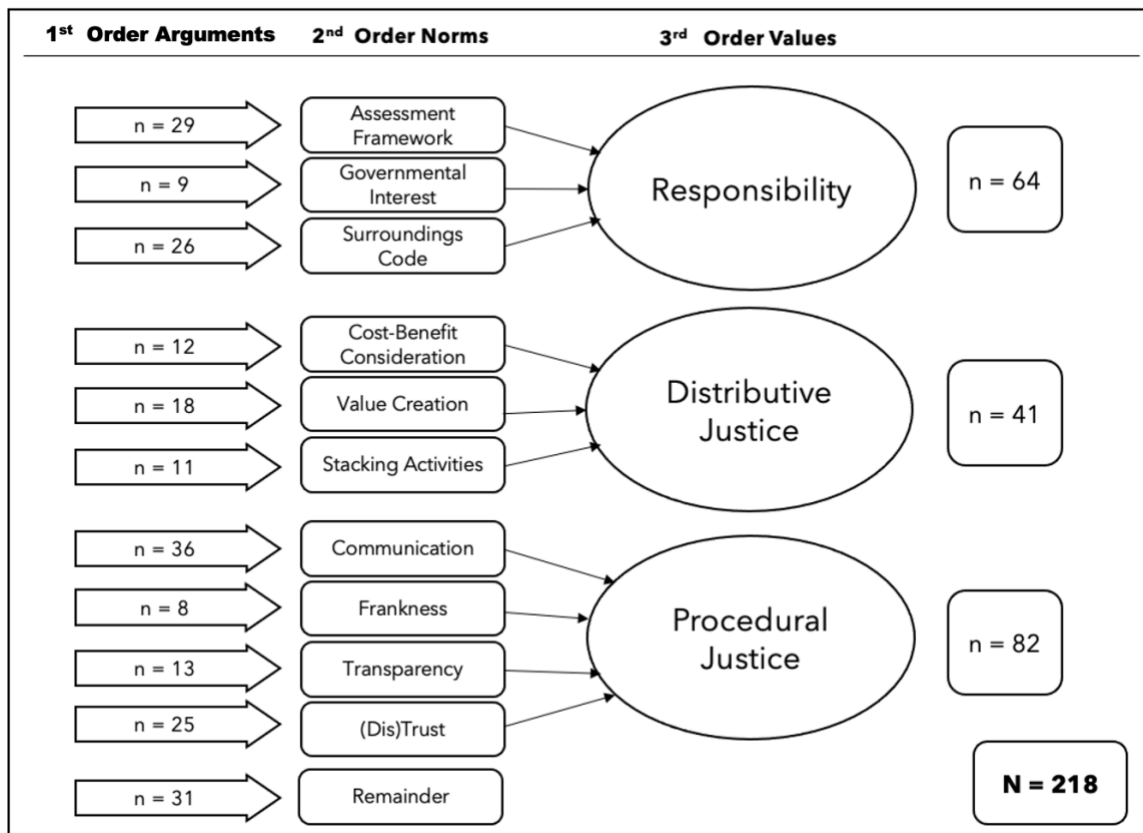


Figure 7: Value Analysis Framework, an adapted Gioia structure visualizing the conception of values in the UHS-s debate from interviews. First-order arguments created from opinions were related to second-order norms. These norms were aggregated to three third-order value dimensions.

#### 4.1.2 Second Coding Round

The second coding round assigned the remaining 218 first-order arguments alongside the theoretical frame of reference. The codes were assigned to two separate code groups based on the frame of reference of the value analysis framework. Code group one corresponds to the actor position, and code group two corresponds to the spatial orientation. The division of first-order arguments amongst the two code groups is demonstrated in Figure 8. Code group one shows the spread of the different types of interviewees, and code group two shows the spatial spread of the interviewees' answers. It is important to note that essentially an equal number



of first-order arguments were conceptualized by initiators as there were by participants, approximately 40 percent each. Experts formulated the remaining arguments. Subsequently, this division of arguments is important to maintain objectivity amongst the findings as both sides of the debate should be represented equally. Equality on the spatial axis is also desired, as each dimension of the debate should be represented proportionally to ensure objectivity. Proportionally because, this division is not solely determined by the interviewees but also by the topics discussed in the interviews. Nonetheless, adequate levels of division on the spatial axis have been obtained. Regional and local scales are represented to a greater extent than the national scale; this can be expected given the nature of this research.

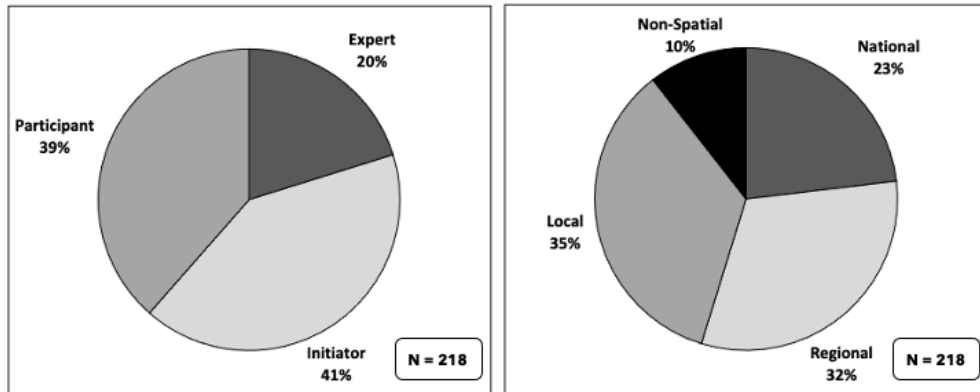


Figure 8: Visualization of the spread of first-order arguments along the frame of reference: a) actor position b) spatial orientation.

Combining the two code groups, as seen in Figure 9, showcases a more detailed representation of the division of the theoretical frame of reference. Expert opinion is focused on a higher spatial scale, with most impressions concentrated on a national scale, closely followed by a regional scale. This may be declared by the fact that experts pose more of a holistic view in the debate. Their expertise aims to contribute to the most optimal system and is less situated in individual projects. The initiator's opinion, on the other hand, resides twice as much on a local scale as on regional and national scales. A possible reason could be the fact that initiators predominantly experience resistance to projects on a local scale, drawing their efforts to this dimension. Finally, participants have an opinion based more on local and regional scales. This may be expected because, in this research, participants mainly consist of lower dimension actors such as regional and local municipalities and NGOs who have been or are actively involved in projects, naturally steering their judgment into lower spatiality.

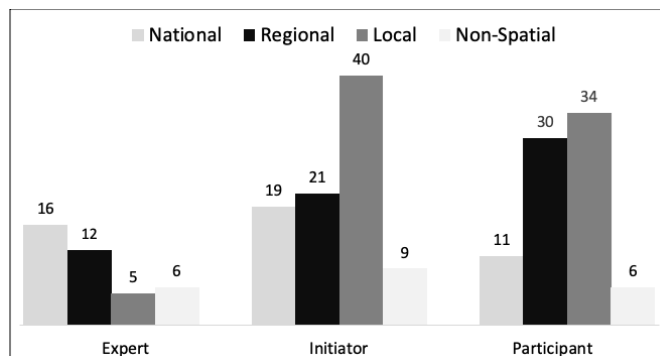


Figure 9: Further visualization of the spread of first-order arguments along the frame of reference, showcasing the spatial focus of arguments made by the three actor groups.

Actors focus on different spatial dimensions in the UHS-s debate. Each actor is involved for different reasons and gains, giving them distinct inputs on where to best tackle the problem. Each angle should be represented equally to provide a complete and objective picture of the debate. This research offers a wide range of actors resulting in large sample size, allowing a balanced spread across the proposed frame of reference.

## 4.2 Detailed Value Analysis

This section will discuss the identified third-order values and their corresponding second-order norms separately. First, the spread across the theoretical frame of reference will be addressed. Next, a detailed analysis across each dimension is conducted, highlighting individual (un)nuanced opinions and offering findings per norm and value according to these opinions. A final look at the relations between the discussed findings, in which potential value or norm coherences and conflicts will be addressed.

### 4.2.1 Responsibility

The value of responsibility is characterized as ‘*control, authority, and obligation based on political and legal power with a corresponding institutional framework.*’ This definition was adapted from the value of accountability coined in the research of Dingum et al. (2016). The value was broadened in this research by extending the contents of the legal and political basis to include control and power over this basis. Consequently, the value contains the second-order norms of the assessment framework, governmental interest, and surroundings law. As seen in Figure 10, assessment framework and surroundings law are most dominantly expressed, each receiving almost half of the arguments. Governmental interest is represented to a lesser extent but still received a significant amount of 9 arguments,

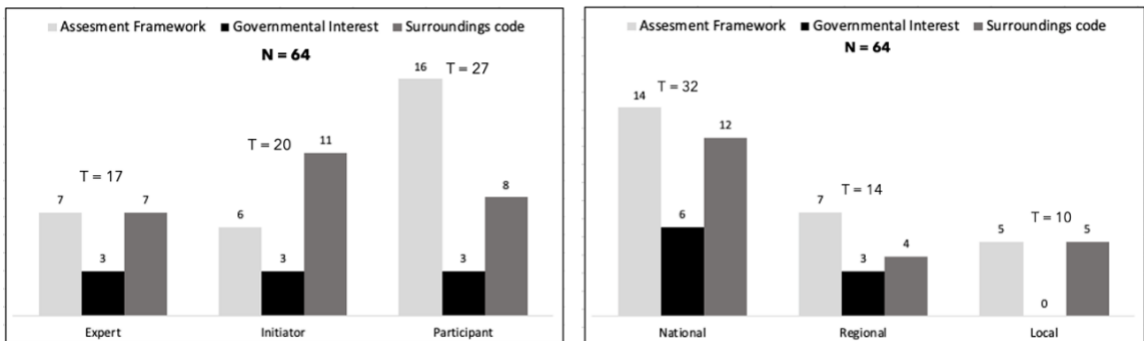


Figure 10: Spread of first-order arguments along the frame of reference for the value of responsibility: a) actor position b) spatial orientation

#### 4.2.1.1 Assessment Framework

*Assessment framework* encloses opinions on the added value of having distinct policies for UHS-s on different spatial scales. Opinions on assessment frameworks are shared amongst all actor types and across the entire spatial axis. Nonetheless, participants most frequently express opinions on this matter, and the matter primarily resides on a national scale. A probable reason could be that participant actors are recipients of policies and thus express. Additionally, policies are most applied top-down. They are thus commonly located on a national scale. Within the norm, opinions are primarily based on the absence of proper institutional arrangements on different spatial levels. A deeper analysis of the norm of assessment framework resulted in several coherent findings. Most interestingly, a lack of national vision and defined policy on

exploiting UHS-s has left a hole for policy management on all spatial levels. Expressed by an expert at TNO and two regional policy developers:

*Expert (TNO): The decisions on how to use these salt caverns are not organized because there is no assessment framework for national and regional governments, national policy is yet to be set. .... you burden local activities with enormous political questions because they are left unanswered by politics..... creating unintended regional policies that are taken up as protection from operators.*

*Regional policy developers (Esnchede): Someone must make painful decisions. If municipalities are unable, a higher scale level must. We expect EZK to roll out the hydrogen backbone and that they make these choices. .... It would help municipalities and provinces formulate a sharper image of what they want..... Now operators go to local municipalities with no proper policy, meaning they must comply with their intention. (Overijssel): The reason that the hydrogen backbone is so laborious is that EZK has yet to take control and make clear policy choices, from these choices, actions can be taken.*

This void leaves questions unanswered and puts pressure on regional and local scales to act on their own, fragmenting policies even further. Experts and policy advisors continue to say that:

*Expert (PM): These decisions should be kept at a national level; the knowledge is not there at the regional and local scales.*

*Mine Council: The national government must take the lead in development whilst having the facts on UHS-s figured out.*

*Regional policy advisor (Overijssel): Decentralized governments will act with self-interest on a local scale. This is no place for decision of national structures and interest..... I do not want to choose where UHS-s take place, I do want to be taken along in the process of integration.*

It is shared amongst actors that regional governments cannot answer these questions and that EZK must take control on a national scale and formulate a national assessment framework accordingly. Participants and EZK agree on the need for regional input regarding eventual implementation.

*EZK (board member): We want to create a national framework within two years..... Create a map of the country in which you can zoom in and it is clear what is wanted and needed in the substrate of that area. (Policy advisor): With that comes a steering philosophy in which we want to relinquish control and leave room for decentralized spatial planning with regards to storage capacity.*

#### 4.2.1.2 Governmental Interest

The norm of *governmental interest* focuses on opinions expressed towards goals and potential conflicts of interest between governmental agencies. Views are expressed equally by all actor groups and reside only on a national and regional scale. Naturally, governmental conflicts of interest are extended to higher spatial scales as the actor field is much larger. A fundamental argument expressed by different actors is the incoherent attitude toward UHS-s of the central government.

*RVO: There is a conflict of interest among ministries..... because hydrogen is still in baby shoes they are not aligned on policy, which can exercise pressure down the line.*

*Gasunie: Those are all different ministries, each with an own agenda..... in certain projects this can be difficult because the agendas can be contradicting.*

Different ministries express different, colliding opinions, creating competition between ministries as each tries to force their will over the other. Also, different opinions are expressed within ministries, and general incongruous perception is felt amongst actors.

*Expert (GovernEUR): If central government does not speak with one voice, it becomes very difficult for decentralized governments to understand what you can work on.*

*Waterboard (Zuiderzee): Like in Zeewolde, you get three separate directorates coming to a municipality from three separate ministries.*

*NGO (NMF): The power that different ministries exercise on municipalities, creates a pressure on where to listen to. .... The same goes for forces between IW and EZK in mining activity, there is a powerplay between departments in which EZK is much stronger than IW.*

These conditions create a sense of confusion amongst lower-scale decentralized governments, putting pressure on regional and local governments to conform to a ministry. Naturally, more powerful ministries gain more traction and push through their desires in a sector. These activities further fragment national policy from regional and local policies.

#### *4.2.1.3 Surroundings Act*

The norm of *surroundings law* expresses attitudes towards the framework of the ‘omgevingswet’ and the structure of the associated participation procedure. Initiators most frequently express opinions on this norm but are closely followed by both participants and experts. As the ‘omgevingswet’ is a national law, opinions are generally located on a national scale but are also expressed across the entire spatial axis. Coordinating the surroundings law brings forth two debate points within the interviews. The first point concerns the role of the ministry of EZK within the participation procedure. It is debated if the current composition of the surroundings law, with a facilitating role of EZK, is the best option.

*EZK: We, as facilitating government, are co-responsible for a good participation procedure. We have an active and complimentary role together with initiators. Together we are responsible for a good process of social involvement.*

*Gasunie: I think EZK should participate more actively, with projects of this size it does not work to realize them in a splintered manner. RVO: EZK should have a more active role as they are the one who provide the project from research to realization.*

*Experts: (TNO) It would be desirable for EZK to take a more leading role during the procedure. (PM) A different division of roles would make things easier.*

EZK naturally believes that the current facilitator role is enough to realize a suitable participation procedure. At the same time, other initiator actors and experts think that EZK should participate more directly and step forward to take a leading role in coordinating participation. The second point of debate concerns the actual structure of the participation procedure outside of the role division. Currently, the structure of the participation procedure is left open to be tailored to individual projects. The operator is responsible for

guaranteeing that the procedure is conducted adequately. Actors are primarily divided in what is the best procedure structure to achieve successful participation.

*Pro:*

*Mine Council: Participation was intentionally kept form-free to keep the responsibility of how to fulfill the procedure is kept where it belongs, in the region of the involved governments..... The surroundings law is an empty shell that is a tool to enriches policy makers to create a decent decision-making procedure.*

*Water authority: We explicitly said in parliament, keep your hands of how you fill in participation or it becomes a checklist. That is not a good guarantee for a good participation procedure.*

*Against:*

*NGO: (NMF) We are really concerned if the surroundings law will work the way that it is intended.....There is no clear framework for participation. If there are no rules, it means that somewhere parties will be let down because everyone will enter the playing field with their own expectations..... My image of the current set-up is 'dear initiator why don't you explain that this is a good idea', this way you leave initiators hanging.*

*Gasunie: This is an ICT project from the government, that is the vulnerability with what they came up with. Lots of large Initiators like Tennent or Pro-rail are seriously concerned with that..... We want to create a Gasunie protocol that shows how we guarantee participation so that we do not have to adjust it every time.*

Arguments for the open framework of the participation procedure are based on the reasoning that standardization of participation results in an improper process as it risks becoming a checklist of participation. Arguments against voice that openness creates expectations that cannot be fulfilled. Initiators prefer standardization as it structures these actor expectations and speeds up the process.

#### *4.2.1.4 Coherence & Conflicts*

Most importantly, coherence is recognized within the norms of the value of *responsibility* and their corresponding findings. The lack of vision and an *assessment framework* on a national scale directly relates to the inconsistency of the different ministries of the centralized government. Which together results in fragmentation of policies and confusion amongst lower-scale decentralized governments and actors. Consequently, the fact that EZK is not taking control over this situation and is yet to take a role in developing these visions also directly relates to the problems of the *surroundings Act*.

*Mine Council: I believe in the excellence of the omgevingswet, but it all depends on the national, regional and local visions*

Because there is no spatial vision and EZK is not taking the leading role that it should there are doubts about the effectiveness of the participation procedure of the *surroundings law*. If EZK were to direct vision and policies towards all spatial scales, it would automatically take a stronger role in the participation procedure and give more clarity on how and where to facilitate participation.

Finally, within the norm of the *surroundings act* lies a conflict in how to fill in the participation procedure, either leave it open for interpretation or not. The two sides of this argument operationalize the definition of a ‘good’ participation procedure in different manners. ‘Good’ is seen as settling in the right place with the right people or structuring the expectations of the involved actors. This dispute can be characterized as an intra-value conflict that should be resolved between actors. Actors should be aligned on the definition of ‘good’ before a well-defined participation procedure can be characterized.

#### 4.2.2 Distributive Justice

The value of distributional justice is characterized as; *Fair distribution of cost, benefits, and other positive and negative external effects, including spatial and temporal distributive justice. Spatial refers to the distribution of negative and positive consequences in a physical spatial sense. Temporal includes intergenerational issues like the exploitation of resources.* This definition was characterized by the research of Dignum et al. (2016). It was deemed as accurately encompassing the value dimension of the characterized second-order norms in the first coding round. These second-order norms are cost-benefit consideration, value creation, and stacking activities. As seen in Figure 11, value creation is most dominantly expressed, receiving just over 40 percent of the total arguments. Cost-benefit consideration and stacking activities are almost equally represented and receive around 20 percent of the total arguments. Logically, all but one expression is located on regional and local scales as the themes do not present themselves on a national scale but can only be expressed on a lower spatial axis. Consequently, each norm is predominantly expressed by participants. Because (un)fair distribution of these norms is most strongly felt by participants, it makes sense that participants express the most opinions towards them.

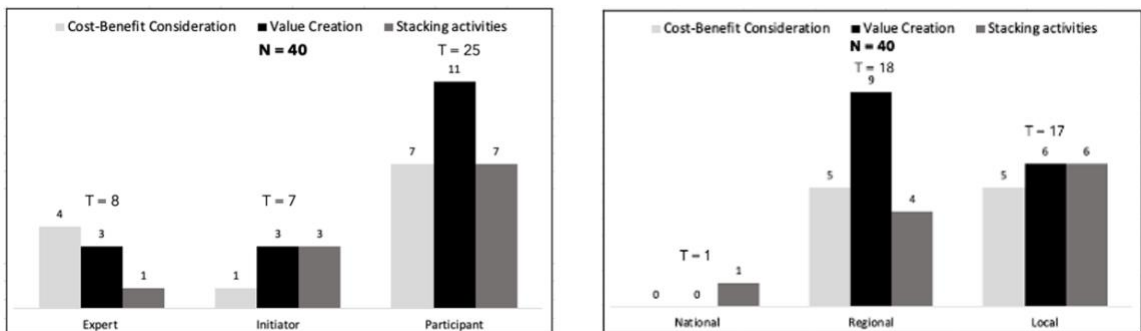


Figure 11: Spread of first-order arguments along the frame of reference for the value of distributive justice: a) actor position b) spatial orientation

##### 4.2.2.1 Cost-Benefit Consideration

The norm of *cost-benefit consideration* exists in attitudes towards the general division of cost and benefit along the spatial axis and between different actors. Opinions are most frequently expressed by participants and experts on local and regional scales. A commonly expressed opinion is that for participation to succeed in a region, there should be a balanced cost-benefit division on regional and local scales versus national scales.

*NGO (NMF): Purely, the idea that there should be a balance between costs and benefit is what participation with the surrounding should lead to.*

*Expert (GovernEUR): Spatial and local integration, is a different story. You see the value of EZK to deliver security of supply on a national scale is at odds with regional living environment quality. To succeed, EZK and initiators should consider linking local scale.*

*Regional policy maker (Overijssel): What is becoming more important for municipalities and provinces is that an activity serves multiple purposes.... It is about the division of regional cost and benefits.*

Actors agree that this division is generally favoring national interest over regional interest. Previous projects showcase the importance of highlighting regional benefits to gain community acceptance.

*Expert (GovernEUR): For example, nuclear powerplant Borsele has gained local support because it contributes to local employment opportunities. Showcasing that despite certain negative aspects, the positive ones outweigh them.*

*NGO: (NMF) If half of the revenues of that solar park were to flow to the region; you think, I don't like it but at least it brings us value. This went wrong with the natural gas extraction in Groningen, they are paying the price but have no gain.*

*Waterboard (Hunse en Aa): You saw that those regions had different relations with the NAM then today. This showcases that displaying local benefit helps, even when not in proportion.*

In the northern Netherlands, the region with the highest UHS-s potential, this regional and local benefit has historically not been felt. Initiators were not concerned with showcasing regional benefits as it was not required, and participants would generally accept the continuous operations.

*Regional Policy maker: At the time rulers would not sharply discuss what a project would bring a region. Such talks would only exist on an informal preliminary stage, the legal frameworks were different then. In the future, these conversations will be made more explicit as they will become part of the process.*

However, this mindset has changed drastically over the past decade, with regional and local costs of continuous gas extraction being more apparent than ever. And with the entrance of the surroundings act, regional cost-benefit consideration will be part of the formal trajectory. Participants and other actors are convinced that regional benefit should be the rule and not the exception.

#### 4.2.2.2 Value Creation

The norm of *value creation* consists of expressions that directly discuss the creation of value for actors along the spatial axis by examining certain outsets or frameworks that impact the current situation. Participants predominately express opinions on a regional scale. Actors generally agree that value creation for different spatial degrees is a form of participation.

*Expert (PM): You should consider where you can broaden the value framework, this way, you create added value for every perspective. .... financial compensation can be a result of the participation procedure.*

*NGO (GGB): Quantification safety in the form of money is an important aspect. If possible, it is the most important and best way to gain people's trust..... The 'omgekeerde bewijslast' makes people a lot calmer of it functions properly.*

The most promptly discussed form of value creation came from financial compensation. The most notable form of such a value framework is the 'omgekeerde bewijslast.' A framework was installed to make financial compensation for victims of gas extraction in Groningen more convenient.

*NGO (SES): People who fill in a claim will be answered to the highest authority in a complicated legal manner. Creating an impossible framework for a citizen or small municipality to file a claim.*

*EZK: In Groningen, this ministry and the operator screwed it up by litigating against people in a highly legal manner, making it very hard to file a claim of damage due to mining activities. This has understandably created anger amongst citizens.*

Before this framework was installed, there was no value created for participants in Groningen. Even more so, it was taken away. This was done by damaging private property and making it almost impossible to claim this damage. By doing so, it became a hostile environment between actors, and there was a lack of participation. Moving forward, the central government tries to actively participate in value creation. An essential principle that the central government maintains is a principle of equality for all participants.

*Waterboard (Hunze en Aa): The principle of equality is holy for the government, for me it is more about explain ability. If two villages experience an equal burder due to gas extraction. Then it is weird that there is a big difference in how you treat one village compared to the other.*

*NGO: (NMF): For UHS-s projects a value framework must be set up. But not everyone is equal, so you should not implement something where everyone is treated as such, this can create regional pressure.... (GGB): A local municipality was pressured to place a data center with a large sum of money. Another example was that a regional hospital's debts would be paid if a local solar park was placed. A local destination plan was pressured by the financial burden of a regional hospital.*

Different actors criticize this principle of equality for not working as the central government wants it to. The equality makes it too ridged, creating tension in regions. The same goes for financial compensation principles. Such measures put pressure on regional and local governments.

*Waterboard (Hunze en Aa): What you want to achieve is that the surrounding, thus local governments and participants can fill in for themselves what the value framework looks like. That is true participation.*

*EZK: You see that when people know what is going on, they become more understanding. To participate in value creation, there are many ways. The first is to let the surrounding share in the created value.*

*Expert (TNO): Example of ultradeep geothermal in Trias Westland shows that it is important to stay close value that is deemed important in that area.*

Actors agree that the best form of value creation is the product of participation with the surrounding. The surrounding citizens and municipalities understand what form of value the region seeks the most. If this



comes in the form of financial compensation or the creation of employment opportunities, it is best to approach value creation on a personalized project basis.

#### 4.2.2.3 Stacking Activities

The norm of *stacking activities* discusses the (un)fair physical distribution of national interest projects in a region. Opinions are directed towards the history and consequences of the fairness of this distribution. Participants on a local scale generally express attitudes towards this norm, but the regional scale closely follows it. The most voiced opinion is that people in a region are becoming saturated with projects of ‘national and societal interest’.

*Waterboard (Zuiderzee): I do notice that political figures and rulers are starting to ask; how much further can we go here?*

*Expert (GovernEUR): By overestimating saturation levels of a region, you risk closing an entire sector. We should be careful with this in terms of UHS-s*

*NGO (NMF): Now take underground energy storage, there are so many national and social issues that the pressure on spatial planning is increasing. .... Through stacking activities people are becoming more and more critical, we must not underestimate this cumulative effect. You should also consider the local impact.... With these integral area development projects, you should consider the cumulative effect*

Different actors express general concern towards the future of UHS-s due to this saturation. This concern stems from the notion that UHS-s is a new and unknown societal project with a profound local nature due to being highly site-specific. Zooming in on the northern Netherlands, the region where most of the UHS-s potential is situated, regional actors express the same concern.

*EZK: There is also the general feeling that the northern Netherlands is an extraction region (wingewest).*

*Gasunie: A lot is going on in the region, with stacking activities from sustainable and mining projects.... The dynamics are similar everywhere: What initiative do you have, in what area and what has historically happened in that area.*

The region has a rich history of energy-related projects playing a central role in people’s lives. Most notably, since 1963, the extraction of natural gas, which till this day is still happening. Also, under the RES program, the northern Netherlands is one of the largest areas in renewable energy production, consisting of wind and solar parks. Such activities have created a sense that it is an extraction region for projects of national interest. Consequently, this has led to the general feeling of saturation amongst regional actors.

#### 4.2.2.4 Coherence & Conflicts

A distinct coherence is recognized in the three different norms of the value of *distributive justice*. This coherence relates to the mistreatment of the northern Netherlands and specifically of Groningen over recent history on regional and local scales. Initiators did not consider the regional benefit of natural gas extraction operations as it was not required. This directly relates to the fact that until recently, no effective value framework was installed for compensation of damages of these activities. This has changed with the

installment of the ‘omgekeerde bewijslast’ replacing the slow-moving, complex legal framework. Finally, Groningen has historically seen lots of stacking activities of energy and mining projects in the region. The combination of these three things explains the feeling of saturation and the view that Groningen is an extraction region amongst participant actors. In recent history, this perspective has become evident to all actors and has developed into a nationwide political debate. This debate has shifted public opinion to oppose further exploitation of the province and created sentiment toward local actors for the first time in history.

Secondly, an intra-value conflict is recognized between actors in operationalizing the governmental policy of *equality*. ‘equality’ in the eyes of the central government means that all participants with the exact costs should be compensated similarly. In contrast, other actors argue that participants who might incur the exact costs should be compensated based on, for example, their income or spatial needs. All actors should debate how to operationalize ‘equality,’ and a general rule should be established. Doing so ensures a system in which all actors operate on the same terms and are satisfied with those terms.

#### 4.2.3 Procedural Justice

The value of procedural justice is characterized as *Transparency, honesty, and timely, full, and unbiased information throughout the life span of a project*. This definition was adapted from the research of Dignum et al., (2016). The value was broadened in this research to consider the full lifespan of a project. The value dimension contains the second-order norms of *communication, transparency, frankness, and (dis)trust*. As seen in Figure 12, *Communication* is most dominantly discussed, receiving almost half of the arguments. Next, (dis)trust receives a quarter of the arguments, and *transparency* and *frankness* together receive the remainder of the arguments. A notable element is that very few experts have expressed opinions on the norms of procedural justice. A potential reason for this might be that experts are more focused on developing high-scale frameworks and are less involved in the softer interrelations of actors. Also, attitudes primarily reside on regional and local scales. A reason might be that inter-relational altercations between actors are most prominently represented on lower spatial scales. Initiators on a local scale mostly expressed assumptions about communication, transparency, and frankness. A potential explanation could be that initiators experience resistance from their surroundings on individual projects. A key takeaway from this resistance is poor performance towards a local community's needs.

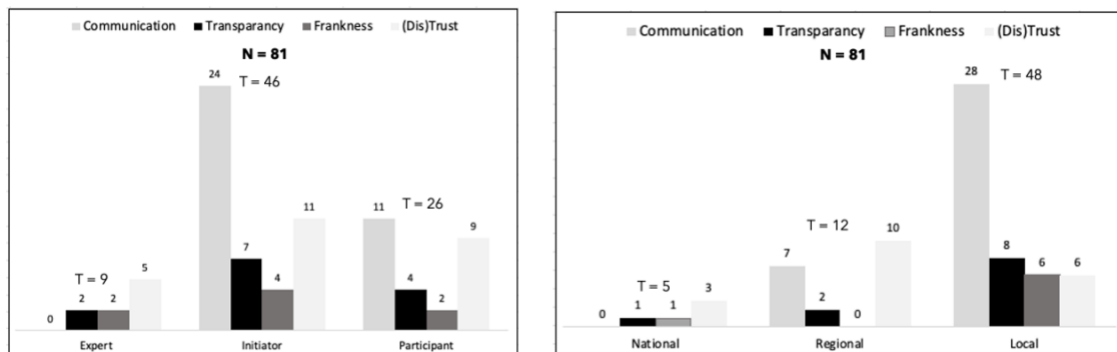


Figure 12: Spread of first-order arguments along the frame of reference for the value of procedural justice: a) actor position b) spatial orientation

#### 4.2.3.1 Communication

The norm of *communication* exists of impressions towards the communication progress between system actors. Opinions are generally reserved towards the involvement of lower spatial actors by higher spatial actors. The debate around the norm of communication focuses on two shortcomings. First and foremost is the lack of communication between the national central government with decentralized regional and local governments.

*RVO: That is what we need, good cooperation between EZK and provinces. Currently, EZK are not constantly talking with local governments..... I recognize there is still a distance and no good cooperation. For hydrogen, projects are leading instead of that it is already emitted into the decision-making process. .... Municipalities give ontheffingsvergunningen, stimulating local pilots. But when such a project becomes definitive, there is too little communication between national and local. It should be considered how such a project will be nationally embedded..... It must be made more visible what is happening in this area, also on a national scale. ....*

*EZK: When I took over and checked the agenda of all my predecessors it was full of appointments with operators. I asked, and when will I speak to decentralized governments? That was not part of the job, now I am turning that around..... When you talk to local rules, and they are aware and willing the conversation is much easier.*

*Regional Policymaker (Enschede): Formally, the region has never been asked and will not be asked any time soon; How do you see hydrogen storage in this area? Informally, we are aware and know what is going on.*

Actors generally agree that EZK must continuously communicate its ambition of hydrogen to lower-scale governments. A lack of communication leaves decentralized governments and local projects in the dark and does not stimulate local initiatives and participation. EZK recognizes the value of having closer contact with decentralized governments and has been trying to establish better connections in recent years.

The second point of discussion is related to the communication of initiators with surrounding participants during and, more importantly, in the project approach. EZK believes initiator parties generally communicate with surrounding participants on a reasonable basis but also recognizes this was not always the case in every project.

*EZK: We have the habit of including the surrounding in an early stage, both local citizens and regional rulers..... About a year before the formal procedure we discuss technical and economic potential of the project with the initiator..... With wind park N33 we have concluded that involvement of the surrounding should have been much better. The feeling in that was created in the surrounding was partially due to our bad communication.*

*Gasunie: In the organization according to the motto of 'voorlopen doorlopen, nalopen' we created the participation ladder, which consists of informing, consult, advising, co-producing and co-deciding. Depending on the subject and situation, the ladder is consulted. This is the linking pin of surrounding management.*

*Regional Policy advisor (Enschede): The problem also is wrongful imagery..... this way you get involved as municipality whilst you have no formal role. (Overijssel): For mining activities EZK*

*says that primary communication responsibility belongs to the initiator and with that, they do not inform us prior to a permit procedure, communication with local governments is not a requirement..... EZK is more of a policy unit and not a guardian of the living environment.*

Gasunie is in the process of embedding a framework on how to clearly define and communicate participation within the surrounding of a project. It has not yet successfully implemented this framework on a companywide scale. Decentralized governments, on the other hand, believe that communication following the permit procedure is not optimal. The province of Overijssel states that decentralized governments are approached once the permitting procedure has started, which they believe is too late. EZK confirms this pattern by stating that they discuss project potential only with the initiator one year prior to the permitting procedure.

Zooming in on the communication of involved actors in the pilot of Zuidwending, an image is portrayed that closely resembles the situation mentioned above. EZK and Initiator (Gasunie) believe they are doing a good job of involving the surroundings and have been doing that for the past ten years.

*EZK: In that area, Gasunie has conducted natural gas storage operation for ten years and communicates extensively with the surrounding, I am impressed with the quality of involvement in the area.*

*Hystock: We began in 2005 in the area there has always been good attention for the surrounding..... On the participation ladder we score in Zuidwending on the highest. I personally have contact with municipality and province, waterboard to a lesser extend..... I believe that in this project we are ahead of the rest of Gasunie in terms of surrounding management.....It is difficult to know how everyone feels. We have a group of ten to 15 people who we have direct contact with, which is only the tip of the iceberg. There is still an unknown group of whom we are unaware of what they really think. From the info we have, we think it is pretty good.*

*NGO (GGB): There certainly is resistance from the surrounding in Zuidwending..... Today we will have a hearing of 'praten met de staten' with Gasunie and the province of Groningen about subsidence in Zuidwending. Eventually they have the power to demand certain conditions for interest group ..... In general, if you have a good story, people go along. You must have communication with the surrounding to get people to go along. Else, they will dig their heels in the sand.*

Hystock recognizes that communication with the surrounding has been with a select group and relies on the information it collects from this group of 10 to 15 people and the corresponding discussion sessions it organizes. Consequently, Hystock states it cannot truly tell what the public thinks. The GGB, an association in close contact with the surrounding of Veendam, states that the surrounding public does resist UHS-s operations, noting that the surrounding has expressed concern towards Hystock about risks related to ground subsidence. The case of Zuidwending confirms how the lack of constant communication with the surroundings of a project results in a misunderstanding of the point of view of other actors, potentially hindering the participation procedure due to local resistance.

#### *4.2.3.2 Transparency*

In the norm of *transparency*, opinions are expressed with concern for actor awareness of top-down movements and concepts in a spatial sense. An exaggerated example would be if local citizens are aware of national policies and everything in between that impacts them directly. Again, two main frames of reference

in a similar context are recognized in the debate. The first discussion consists of attitudes toward the level of transparency from the national government, which is deemed necessary by different actors for UHS-s success.

*Expert (TNO): With UHS-s there is a geological constraint that once you have analyzed all potential options on a national scale. You will be able explain and justify that a specific location is crucial. But EZK cannot right now, as they are yet to do that. (PM): People want to know the consideration of a location, why here?*

*Mine Council: In case of UHS-s you must be able to explain why necessarily that location is so important for national interest, I hope EZK will do their homework regarding that.*

*EZK: That means that you will result in specific locations for UHS-s that has experienced previous mining activity. With that comes a serious discussion at the front end on why that specific location is required..... In the mining policy I want to make a large plan at the front end where I can reference to explain why this location was chosen for a project.*

*Hystock: Zuidwending was chosen for two reasons. The distance to the Noubyon factory in Delfzijl. And more importantly, two km from the site lies a bundle of the gas network that containing five of the six largest pipelines of the Netherlands.*

UHS-s is the second stage of mining activity in a location, the first being salt extraction and the creation of the cavern. Also, UHS-s are very site-specific. These two technicalities mean that transparency as to why a particular location is chosen is vital for the participation of local actors. At the front end, it must be illustrated that that location is of national interest for specific reasons. For example, in the case of Zuidwending, an apparent reason is given as to why the site was chosen, making it undoubtedly an ideal location for UHS-s. EZK is aware of this need and is developing a policy framework to ensure this transparency for local actors.

The second debate relates to the transparency of the project and the corresponding process. Actors believe that to maintain a transparent process; complexity should be avoided.

*NGO (NMF): You should not complicate things. You should have the conversation with the surrounding and explain what will happen, the consequences, the risks and what you are doing in the area.*

*Regional policy advisor (Enschede): You should have nothing to hide, lay your cards on the table because transparency creates trust.*

*Hystock: Don't overcomplicate. The ordinary man wants no trouble but just honest answers, it's about these basic things.*

It should be clear to all actors, who is responsible for the project how the participation process is put together. A simple and clear process creates trust and amounts to a base of understanding of all actors.

*Waterboard (Groningen): Good participation is much more a process than it seems in advance. You can arrange it, but it does not mean that people trust the process and feel they have been heard. You must be honest and clear at the front end.*

*EZK: When you surprise the surrounding with a project, and they must react you already lost. The art is to have transparent plan to which you can reference which shows what is useful and necessary for the process.*

Generally, it is believed among actors that if the two discussed issues are considered, a transparent process is guaranteed. Transparency creates trust, which establishes a basis for an inclusive project procedure. Therefore, for participation to succeed, transparency is essential.

#### 4.2.3.3 Frankness

The norm of *frankness* is reserved for opinions on how higher spatial scale actors act towards lower spatial scales in sincerity and directness. Moreover, this extends to the approach of participation from initiators to participants. Most opinions were reasoned towards the notion that frankness is an essential factor to consider during the participation process by initiator parties.

*Expert (TNO): Don't act as if people can influence decision when they cannot.*

*EZK: (1) I don't like the term participation because participation suggests that actors decide equally in the project. For the most part a project is decided on technical factors. (2): At the front end you must be completely clear on what people can and cannot influence.*

*Gasunie: When you have co-deciding on the participation ladder, this is not the case for everyone. You must check with the surrounding where this is possible you must be honest about that. Some things they cannot influence. (Hystock) Transparency is a basic need. But then you also should not linger to tell what more there is to come.*

*NGO (NMF): This went wrong with the wind park of N33. The option of no windmills was never on the table..... You must be honest and say: It has been decided that this is not in the scope of this participation procedure. The scope is to lower nuisance or etc. This creates a framework for participation.*

Moreover, essential factors of frankness in terms of what actors can influence and decide on. And in terms of what is not part of the participation procedure. Doing so clarifies the framework and scope of the participation procedure and confirms that no false hope or unfulfillable expectations are created. If actors understand the procedure and their role within it, they will not be surprised, creating a sense of trust. Therefore, it can be determined that a suitable participation procedure requires frankness about the contents of this procedure.

#### 4.2.3.4 (Dis)Trust

The norm of *(di)trust* expresses opinions on relations between actors. But also, on the reasoning behind forms of (dis)trust actors have about other actors and their intentions. Participants on regional and local scales equally express (Dis)trust. Logically, (dis)trust is felt in two directions as both actors know that the other (dis) trusts its actions. Distrust is most expressed by participants towards initiator parties. First and foremost is distrust towards EZK and the central government.

*Expert (GovernEUR): EZK is often accused of choosing sides of the business and not considering the values of an area.*

*NGO (SES): EZK has a great interest in changing the current geopolitical situation where approximately 500 billion euros is still in the substrate. (NMF) A complicating factor is that EZK looks very bad in Groningen because of their reputation of pushing through policies and not reasoning for the people. EZK being competent authority for UHS-s, you must seriously ask if they are the right fit.*

*EZK: The question is if the Netherlands trusts it, of they know that EZK is responsible. I have tried to overcome this by creating an advisory board for geological services with a broad composition.*

*Waterboard (Groningen): With gas extraction at the time. When they started drilling already people were saying that it will cause ground subsidence. This has been denied for twenty years until it was no longer deniable.*

EZK is not trusted due to its reputation over the years. This distrust is the largest in the northern Netherlands and especially in the province of Groningen. Different actors distrust the organization for various reasons, but each can be traced back to wrongful acting when installing regional projects. Another initiator that most actors do not trust is the operator. This is mainly because of the public duty some operators fulfill while having a clear interest in a specific outcome.

*Gasunie: As operator you create trust through a certain signature. People recognize, Gasunie always does a good job. Existing organizations with contacts in an area is different than new organizations. For example, CORRE energy is receiving much more negative public reaction because they are a new organization in the area. EZK also treats them differently, they receive much more guidance and attention than us.*

*Municipality (Enschede): The proximity of an operator is also a relevant factor. This is a problem experienced by AkzoNobel. Moving their office further away created both a literal and figurative distance from the area.*

*Expert (PM): Operators are private businesses but also conduct research, private companies are responsible for a public duty. This can easily create distrust towards the independence, which can radiate towards the whole sector. Research of these parties is generally distrusted in advance..... Because hydrogen is new, one of the assumptions is that you need a trusted knowledge base for when people have safety concerns. You can already foresee that this will cause trust issues for UHS-s research.*

Generally, new operators in an area are not trusted immediately. It takes time before actors believe an operator's intentions are not only to fulfill self-interest. New entrants are perceived as not knowing the interest and interplay of that area, leading them to make wrong decisions. Also, with hydrogen technology still in an early stage, research on its safety in specific settings still must be conducted. This research will be left to operators, causing another basis for distrust. Zooming in on Zuidwending, participants' perception towards initiators is represented similarly.

*Hystock: EZK gives us room to do things our way, this is wise because we have the contact in Zuidwending. EZK and Groningen has a red fabric and bull association.*

*EZK: If we were to take over the role of Hystock in organizing information meetings for the surrounding of Zuidwending. In the current stage, we would risk it creating negative repercussions on the good relation Gasunie has created with the surrounding.*

Hystock (Gasunie), a well-known operator in the area, conducts the participation process with the surrounding. Both EZK and Hystock independently agree that if EZK takes an active role, the surroundings might resist their direct involvement. The local participants do not trust the intentions of EZK and do trust the intentions of Hystock.

#### *4.2.3.5 Coherence & Conflicts*

An apparent value coherence is recognized between all the norms of the value of *juridical justice*. This coherence, first and foremost, stems from the fact that each norm begins with the outset of higher scale initiator actors and the interpretation of these actions of lower scale participants. In other words, the connection between the two actors embedded in the participation procedure is critical. From this conception, actors across the interviews believe that good *communication, transparency, and frankness* are fundamental factors that must be guaranteed for successful participation. About the final norm of (dis)trust, assurance of these norms during a project creates trust towards the intentions of initiators for participants. In other words, good communication, *transparency, and frankness* in a project build trust, resulting in good participation. Applying this notion, EZK does not communicate appropriately with decentralized governments and has no active role in communication with the surrounding during the participation procedure. EZK has yet to develop a framework showcasing why a specific location is chosen at the front end, hindering transparency. These factors, among others, create a distrust in the intentions of EZK, crippling the possibilities for good participation in UHS-s projects.



## Chapter 5.

### Synthesis

The following chapter will further integrate the data analysis by discussing the UHS-s in their entirety to present actor perspectives that could not be addressed in the previous chapter. The perspectives presented in this chapter cannot be aggregated via specific norms and value dimensions but are essential for understanding overarching principles. A synthesis presents the final stage of reasoning, in which the ideology of specific ideas is presented. This synthesis will first touch upon general actor beliefs that could be recognized during the interviews. By taking a broad approach, relevant actors' situational factors and characteristics can be shown. Also, the synthesis will relate these findings and that of the previous chapter to the institutional setting of this research, integrating the presented perspectives. Finally, the different perspectives of the decision-making process will be summarized, and final comments will be made. The proposed synthesis shows interrelational aspects of the value dimension and norms. Ultimately, creating a better outset for the conclusion of this research.

#### 5.1 Actor beliefs

This section will present the beliefs of the different actor groups on the greater actor field that also holds outside the direct UHS-s setting. Nonetheless, these perspectives do correlate with the identified norms and values and present a vital perspective that must be identified to draw a complete picture.

First, expert beliefs will be discussed. It is interesting to note that all experts had a mutual understanding of how to develop an inclusive decision-making process for UHS-s. Moreover, experts reasoned that the UHS-s sector is fragile and must be handled carefully. This notion stems from the mismanagement of gas extraction in the northern Netherlands that largely involved the same actors. Experts also believe operators should be aware of this historical situation before entering this market. This brings concern that new entrants might not be aware of the interrelation history and possibly make an unbalanced estimation of the value package at play, which could create local resistance. Due to its high location specificity, resistance at critical locations would destroy the potential of UHS-s. This concern is shared by EZK and NGOs, who believe there is little room for mistakes with the current level of saturation in the region. Another insight that experts shared is the understanding of creating a well-balanced cost and benefit format. Experts explicitly state how a positive value balance must be installed for participants to develop an inclusive decision-making process. This technical yet simple ideology of creating a positive value balance seems to be lost with other actors when operationalizing the idea of participation. Experts believe that the reason to involve actors in the decision-making process is to create a positive value balance for those actors to recognize the value of conducting the project.

Initiators have a shared understanding of approaching participants in the decision-making process. EZK, Gasunie, and governmental agencies all state that local participants should be approached with an open mindset. Theoretically, the best approach to involve participants is by listening to what they want, how they see value for themselves, and how they want to achieve it. This ideology aligns with that of experts on how actors should be involved to positively increase their value balance. However, in practice, such an approach creates expectations that potentially cannot be fulfilled by the initiator. Not fulfilling expectations can be much more harmful to a project than creating lower expectations in the first place. Therefore, although aware of this approach, initiators try to achieve the best possible participation while also managing expectations.

Generally, this balances frankness on participation with the level of participation itself. Gasunie, for example, has designed a tool called the participation ladder, which guides them to the appropriate level of participation. Per definition this tool limits participation in the decision-making process because it is a form of standardization. The project procedure was designed in an open framework to ensure the customization of participation for each project. Therefore, EZK believes that standardization should not be part of participation. Large operators like Gasunie, on the other hand, do not trust that the open framework of the project procedure will function as intended. These operators believe standardization tools could increase the effectiveness of the project procedure. By standardizing the procedures and creating policies, operators can more efficiently communicate their intentions with the surroundings. These two clashing beliefs of two essential actors that are responsible for guaranteeing participation should be overcome. To overcome this barrier and adequately position the project procedure, trust must be restored in its effectiveness.

Participants have a shared ideology on the right of participation in the decision-making process, but how to participate varies across this actor group. NGOs and decentralized governments believe that all participants should be involved in decision-making. Both actors agree that currently, participants are left out of a crucial stage, where the content of participation is defined for a project. However, both actors agree that early participation requires a certain level of technical knowledge. In that sense, representatives claim that residents do not want to be presented with complex questions that need technical expertise to understand. Representatives state that residents want to be presented with a concrete plan showcasing opportunities and downsides to a potential project. Decentralized governments fall into a similar category as they do not wish to be burdened with complex choices regarding where and how a UHS-s project will be developed within their jurisdiction. Decentralized governments do not have the resources, knowledge, or time to be actively part of the early stages of participation. Moreover, they believe that it is the duty of EZK and the corresponding operator to develop the hydrogen backbone and the necessary forms of UHS-s. EZK should roll out this network, deciding on the technical design and the best locations. Decentralized governments believe that these choices must be made on the scale it operates on, which is a national scale. In terms of participation, decentralized governments wish to be included once a project and location have been decided upon. For them, personal participation entails leaving room for decentralized governments to consider integrating a project into their ambition in the area. Decentralized governments wish to explore the opportunity for such a project to serve a multi-purpose social role that benefits the region and boasts a better regional cost-benefit consideration.

## 5.2 Revisiting the institutional setting

Having discussed the norms and value perspectives alongside different actor beliefs, this section will reflect these findings in the institutional setting. This research first explores the institutional setting to define relevant actors, system boundaries, and rules of the game. Then the research conducts an extensive actor-based value analysis of the decision-making process. Such an analysis can be viewed as an extension of the institutional setting previously explored as it goes beyond the pre-defined system boundaries to address relevant actor perspectives. Therefore, this synthesis will reflect on this extension by placing the uncovered perspectives back into the institutional setting to uncover potential confronting perspectives.

As defined in chapter three, the institutional setting adheres to the Mining Act and, more importantly, the Surroundings Act. With the Surroundings Act comes the introduction of the new project procedure. This procedure will become the standard procedure for all UHS-s activities. The project procedure is left open to customizing the decision-making process to enable good participation of all actors. This openness of the procedure and the definition of good participation is where the institutional setting of this research will be

revisited. With the newly uncovered perspectives of this research, a more elaborate reflection on these aspects of the project procedure can be made.

The value of responsibility is closely related to the project procedure as responsibility is one of the vital aspects that actors doubt within the procedure. Regarding the norms, installing an assessment framework would expand the institutional boundaries by more closely defining the desired outcome of the project procedure. Such an expansion would directly impact the norms of governmental interests and surroundings code. A national assessment framework would create a uniform understanding for all ministries and governmental agencies. Also, the surroundings code would potentially be addressed to a lesser extent as one of the most significant critiques, its openness, would be decreased when a national framework would be able to guide the project procedure more closely. Following the values of distributive and procedural justice, including these values and their norms in the decision-making process, would likely significantly impact the institutional setting. Moreover, the system-wide notion of good participation would be defined according to the interpretation of the norms of distributive and procedural justice. Considering norms like cost-benefit consideration and value creation would define actors' perception of good value more clearly. At the same time, norms like communication, frankness, and transparency would clearly define actors' perceptions of a good participation process. So, by actively considering these norms during the project procedure, good participation can be defined and guaranteed. In terms of the institutional setting, determining what is good participation would create a more developed project procedure. A more developed project procedure can be categorized as an extension of institutional boundaries. In that sense, considering the identified values and their corresponding norms during the process extends the project procedure in an institutional context. It further defies what the procedure must entail and what it needs to be classified as successful. Such an extension of the institutional context would benefit developing an improved project procedure as many actors do not believe in the current setup. By further defining the institutional borders and guidelines, the main principle of the procedure, openness, and customization of each project, will not be altered. However, the ability of the project procedure to perform as intended will be increased as actors can better anticipate how to design and participate in the project procedure correctly.

### 5.3 Final perspectives

Considering the presented beliefs of different actors and the reflective perspective on a potential new institutional setting, this section will discuss the final perspectives and their corresponding interrelations.

The dominant perspective within this research is the notion that a central form of guidance must be operationalized to create a proper UHS-s decision-making process. The creation of a national vision and assessment framework would impact the perception of the identified norms and values. A national vision would align ministries, national agencies, and decentralized governments to maintain a common understanding. An assessment framework would install policies across the spatial scale and replace the current fragmented policies. In addition, a national vision would also address the misalignment of actors in terms of procedural justice. A national vision and assessment framework would increase the frankness and transparency of local projects. Explaining what a project entails and why it is being installed from a local to a national perspective improves communication and establishes trust among participants in the initiator's intentions. In terms of the actor's beliefs, a national vision and assessment framework would complement them in several manners. With the current openness of the project procedure, large operators are creating formats to handle participation and develop procedures for embedding projects on a local scale. Doing so on a large scale saves time and resources. However, this is the straight opposite of the intention of the project procedure. Therefore, actor guidance is needed to create trust in the project procedure and ensure it fulfills its purpose. Such guidance could potentially be the further development of the boundaries of the project

procedure. This institutional expansion could be developed within the national vision. Lastly, for participants like NGOs and decentralized governments to participate in the decision-making process in a meaningful manner, a national vision is essential. These parties do not possess the expertise to participate in the early technical stages of a project but desire to participate in the local embedding of a project. Currently, little communication with decentralized governments about UHS-s is undertaken. This leads to not incorporating UHS-s into the substrate's ambition properly. A national vision and related policies create a base of knowledge for these actors and enable them to incorporate UHS-s into their ambition. Aligning policies on a national and local level would allow for better local embedding of UHS-s projects and create more efficient customization of the project procedure.

Another critical perspective throughout this research is the perception of value and participation. In terms of norms and values, this perspective is represented by distributive justice and, more specifically, cost-benefit consideration and value creation. A system-wide perception is that local (and regional) value must be more clearly shown as the current cost-benefit division heavily favors the national scale. The problem, however, lies in the definition of local value. Actors hold different perspectives of what local value entails and how it should be operationalized. Experts believe local value is operationalized by creating an individual positive value balance. This notion focuses on the fact that each person has their perception and should not be treated equally in compensation. Each community has its preference on how regional value should be shown. EZK does not share this perception; it holds an equality principle and believes that compensation should be equally distributed across projects and individuals. NGOs generally believe that the best form of personal value consists of financial compensation, while decentralized governments focus on projects to serve a dual purpose of benefiting the local community. As seen above, actors hold different perspectives on local value. However, what most actors do agree upon, is that the perspective of local value is what should drive participation in the project procedure. Experts, EZK, operators, NGOs, and decentralized governments all believe that local participation in decision-making should not consist of choices on the validity of UHS-s project or its technical conditions. Although local participants want to be informed about these early decision-making stages and desire a transparent and frank procedure, they do not want to be bothered with these decisions themselves as it is a national decision. Nonetheless, local participation should involve operationalizing and fulfilling how and where local value can be created. With a changing timeframe over the years, all actors have realized that true participation on a local scale means to let the people decide how and where value is to be created. Therefore, a system-wide perspective can be identified, stating that local participation in the project procedure directly translates to participating in local value creation.

## Chapter 6.

### Conclusion

This chapter will first provide a general overview of all the findings and explicitly answer the SRQs and MRQ. The main finding per SRQ can be found within their respective chapters. This section will discuss the SRQs findings in three sections corresponding to the thesis structure and answer the MRQ. The research aims to provide insights on arranging an inclusive decision-making process. Therefore, value dimensions are identified and operationalized through literature research, interviews and coding. A design research approach was taken, and a theoretical framework was formulated to capture the value dimension.

#### 6.1 System Exploration

SRQ1 aimed to explicate the problem by defining the scope of the problem and formulating the underlying forces that influence UHS-s potential. SRQ2 uncovers the technical and institutional settings and the relational playing field of actors. Both SRQs have an explorative nature and set out to understand the complex socio-technical setting of UHS-s in the Netherlands. The applied method consisted of explorative literature research to position the research in the playing field of actors concerning the decision-making process of UHS-s. The technical exploration showcased that UHS-s is a proven storage technology applied worldwide, where the potential for UHS-s in the Netherlands is the second largest in Europe. The Dutch onshore potential is primarily concentrated in the four most northern provinces of the country (approximately 65 percent). This region is also where the first UHS-s pilot is situated. Operations of the caverns in Zuidwending have been proven to cause local ground subsidence. The institutional exploration focused on applying the Mining and Surrounding Act and its related procedures. The new project procedure of the Surroundings Act follows a decentralized philosophy where control over participation is put in the hands of the operator. The procedure contains an open framework that offers the possibility to customize the procedure to a specific project. However, the absence of concrete guidelines might result in insufficient participation procedures. Embedded in the two Acts are the relational positions of involved actors: experts, initiators, and participants.

The literature research also provided the base for SRQ3, which sets out to operationalize a set of theories through a framework capable of capturing value dimension from public debate while ensuring traceability to individual actor opinions. The Value Analysis Framework consists of two parts. The frame of reference structures expressed arguments during the interviews regarding actor position and spatial orientation. While simultaneously, the conceptual theories operationalize value conception from an expressed opinion. The Value Analysis Framework delineates value dimensions by arranging individual arguments into norms that can be aggregated into value dimensions while providing feedback about their origin.

#### 6.2 Value Dimensions

SRQ4 aimed to capture a complete picture of the UHS-s debate regarding actor relations and (un)nuanced opinions about the decision-making process. A focus was put on the accurate and objective representation of all actors throughout the debate. To facilitate this conception, a total of seventeen interviews were held, following a semi-structured interview guide. The interviews were transcribed, and relevant arguments were collected as open-source arguments in ATLAS.ti, a qualitative data analysis software. The arguments were

pooled into ten norms aggregated into three value dimensions. A proportional division of the coded first-order arguments alongside the frame of reference was desired to ensure objectivity. Adequate division on both actor and spatial scales was obtained.

Following the data analysis, SRQ5 aimed to uncover the decisive value dimensions for inclusive decision-making while also considering specifications that potentially conflict with or strengthen this process. SRQ5 is embedded in the detailed value analysis of this research and extends from individual (un)nuanced opinions to strong trends uncovered within and between the value dimensions. The three value dimensions aggregated from the interviews consisted of responsibility, distributive justice, and procedural justice. Each value dimension points to a part of the UHS-s debate that actors consider to be of importance for an inclusive decision-making process. Responsibility should be taken in terms of the creation of a distinct vision for UHS-s. Currently, UHS-s operations are not centrally guided, leading to confusion among ministries and lower-scale actors. This confusion has led to fragmented policies along the spatial scale. Alongside the confusion lies an open project procedure, in which actors believe participation cannot be guaranteed without the proper guidance of the national government, distributive justice battles for the fair distribution of cost, benefit, and consequential negative external effects. Distributive justice is not equally divided across the actor field. This is most apparent in the northern Netherlands and, in specific, Groningen. Actors believe that if future UHS-s projects cannot install a feeling of distributive justice among participants, local and regional saturation will be highly likely. Finally, procedural justice relates to the relational behavior of initiators and participants during the decision-making process and during the remaining life of a project. To install trust and facilitate an inclusive decision-making process, a sense of procedural justice is crucial among all actors.

### 6.3 Main Research Question

The MRQ is answered by combining the theory and answers to the five SRQs, along with insights from the synthesis of the previous chapter. The MRQ is as follows:

*What value dimensions are considered by actors for an inclusive decision-making process to realize underground hydrogen storage in salt caverns?*

The findings of the sections above present a coherent story of the value dimension most dominantly recognized by actors to create a structured and inclusive decision-making process. To summarize, the value dimension under consideration are responsibility, distributive justice, and procedural justice. For the value dimension of responsibility, actors shared their understanding of its focal points. The lack of national vision led to inconsistent policies and confusion among all spatial scales and actors. EZK is desired to take a leading role in developing this vision in the form of a national framework. For the value dimension of distributive justice, a central norm recognized by all actors was the unequal distribution of regional and local value compared to the national value. This feeling was mainly related to the gas extraction in Groningen, where actors feel that unjust policies have led to a saturated region. In the case of Procedural justice, a common notion is that to have an inclusive participation procedure, lower-scale participants must trust higher-scale initiators. Good communication, transparency, and frankness within a project are required to create trust. The synthesis presents us with different actor perspectives surrounding the perception of inclusive decision-making. The most dominant perspective is that a central form of guidance must be operationalized to create a proper decision-making process. A national vision and assessment framework would align actors and policies across the spatial scale and positively impact almost all identified norms. Additionally, it has a dual function of expanding the current institutional boundaries. Installing a greater sense of trust in actors in the project procedure by creating common base knowledge and allowing for the better local embedding of UHS-s projects. Concerning the project procedure, although not all actors agree on the contents of local value, all

actors do agree on the notion that local value should drive participation within the project procedure, which means that local participation should consist of operationalizing how and where local value can be created. Both perspectives offer insight into actors' interpretation of inclusive decision-making, ultimately showcasing a more elaborate definition of participation by extending the institutional borders of the project procedure would lead to the ability of actors to create a more inclusive decision-making process.

Each finding showcases current shortcomings about the value dimensions that should be re-considered before a successful decision-making process for UHS-s is realized. Different perspectives highlight how these value dimensions could be improved, operationalize local participation, and create a more successful decision-making process. To summarize, success entails that all actors can participate in the procedure as intended by the institutional framework, meaning that it succeeds in operationalizing participation within the decision-making process. The integration of these findings answers the MRQ by showcasing the current shortcomings and opportunities. These lessons should be applied to the UHS-s setting to create a better defined and ultimately more inclusive decision-making process.

## Chapter 7

### Recommendations & Discussion

This chapter will put the research findings into context to form recommendations. The recommendations are critical suggestions regarding the best course of action following the interpretation of the research findings and conclusion. The recommendation intends to offer a guiding solution to resolve proposed issues resulting in an improved situation. Following these recommendations will be a discussion of this research. Within this discussion, the limitations of this study are described and elaborated upon. The thesis is finalized through a reflection of the critical insights and obstacles of the research and writing process of the past six months.

#### 7.1 Recommendations

In this section, this research's findings and synthesis are elaborated upon by presenting the full extent of the interconnectivity of the value dimensions. These interconnected topics are combined to form the practical recommendation of the UHS-s debate. Next, theoretical recommendations are formulated that can be built upon in future research. The reasoning for each recommendation builds in a sequential order, where central components are highlighted to form the recommendation.

##### 7.1.1 Practical Recommendations

###### 7.1.1.1 Guidance

The first recommendation, which shines through in all value dimensions and actor perspectives, is the **need for a central form of guidance**. Actors believe the *lack of guidance* translates to unorganized and *inefficient communication between actors* across the spatial scale. It is generally perceived that the competent authority, EZK, should take a leading role in developing UHS-s. Regarding the responsibility norm, EZK must develop a national vision and assessment framework for hydrogen use. This creates national policies for all ministries, which can be directed toward lower spatial actors. This allows decentralized governments also to develop new policies that replace potential current fragmented policies, creating a *centrally coupled spatial scale*. A leading role of EZK alongside a structured vision on all spatial scales automatically translates to better forms of distributive and procedural justice. Centralized policies can *extend* the current *institutional boundaries* to form a more concrete foundation for the contents of the project procedure. By extending these boundaries to include the norms identified within this research, a more *inclusive project procedure* can be defined.

Ultimately, such an extension would create more *effective value frameworks* for better cost-benefit division on regional and local scales. Actors agree that value creation is most effective if done in consultation with the surrounding, which *requires trust* between initiators and participants in their intentions. Actors acknowledge that trust *requires* good communication, transparency, and frankness during projects. Thus, these three norms of *procedural justice* are fundamental factors that must be guaranteed for successful participation. To do so, EZK and experts believe a *national framework* at the front end is *required*.

According to this sequential reasoning, *a national vision and policy* for hydrogen *must be developed* by EZK. Ultimately, these complications all circle back to the fact that EZK must be this *central form of guidance* for



developing the national vision and policies. Such a role would automatically strengthen communication between EZK and lower spatial actors, establishing trust and paving the grounds for better participation in the project procedure.

#### 7.1.1.2 Project Procedure

The second recommendation is to **extend the institutional boundaries of the project procedure**. In the current system, an *inter-value conflict* exists. This is caused by the different actor perspectives on the *effectiveness of the project procedure* to guarantee participation as intended in the Surroundings Act. The current design in the project procedure favors an open and deliberately unstructured procedure for participation to tailor the procedure to each project. EZK takes a facilitating role in this process, while operators must guarantee adequate involvement of all actors. Most actors, including experts, operators, and participants, believe this *openness provides little guidance* to ensure a suitable participation procedure and feel a more structured approach is necessary. Some initiators like EZK and the mining council believe this, in turn, might result in a checklist for participation, which undermines the whole purpose of the project procedure. As a result of this distrust in the procedure, large operators are creating their own standardized process that provides levels of participation according to the situation. This *standardization directly opposes the intention* of the project procedure.

When considering the possibility of *new/foreign entrants* into the market, distrust in the current procedure becomes even more apparent. Most actors believe that well-known operators like Gasunie or TenneT are aware of specific value dimensions and the relational field of regional actors and thus capable of constructing an inclusive decision-making process. However, the same cannot be said for new entrants. A lack of feel for a region and Dutch procedures in general causes experts, operators, NGOs, and even EZK to think that new entrants might *not be able* to create an *adequate participation procedure*. An example of such a new entrant is Corre Energy, an Irish operator of LSES. Corre Energy is in the middle of developing several *Compressed Air Energy Storage (CAES)* facilities in Groningen. Gasunie and regional NGOs believe that upon entering the new project procedure, Corre energy will not be aware of the saturation levels in the regions and can potentially receive fierce resistance to their projects if no adequate value and participation opportunities are displayed in the region. This example relates to CAES, a technology very similar to UHS-s. It can be assumed that an equivalent value dimension applies to CAES as to UHS-s. Therefore, the sketched situation may also become apparent for UHS-s.

Another aspect that critiques the current design of the project procedure is its *openness for the creation of local value*. Actors hold different perspectives on what local value should entail, which causes confusion among actors. This notion, *combined* with the openness of the project procedure, has led to a *dysfunctional framework* that cannot function properly without the necessary guidance.

A common theme in the sketched shortcomings of the project procedure is the lack of a guiding factor. The openness of the procedure has left room for insecurities and unanswered questions, leading to actors doubting the ability of other actors and the procedure itself to perform as intended. In reactance, operators have started to *standardize* aspects of the procedure to overcome these insecurities. Doing so, however, makes the procedure less customizable *and beats the purpose of its openness*.

Therefore, instead of standardization, this research recommends extending the institutional boundaries of the project procedure without necessarily changing its structure. By *incorporating the norms and values* of this research alongside creating a *common understanding* of the contents of *local value and participation*, the project procedure can be clarified and guided towards becoming an inclusive decision-making tool. To properly extend the procedure, EZK should put itself in a guiding role. Upon developing a national vision

and assessment framework, the institutional borders of the project procedure can be extended, and EZK could position itself. Ultimately, when actors have become acquainted with the new procedure and participation can be guaranteed within the decision-making process, EZK could step back into a more facilitative role.

#### 7.1.1.3 Role division

Both recommendations show that EZK must take a more active role in creating a more inclusive decision-making process. A problem that both EZK and RVO have expressed is that EZK is already considered understaffed to run its current operations. *EZK is operating at full capacity* and cannot expand its operation to ensure better participation procedures. Therefore, it is recommended that **EZK is aided in fulfilling its new guiding role.**

Potential candidates are executing *governmental agencies* like the RVO or SODM. These agencies could (partially) fulfill this task. RVO and SODM are already in close contact with EZK and are familiar with their operations. When suggested to the RVO during an interview, RVO recognized that RVO could potentially fulfill such a role as they have the capacity and expertise. Another candidate to potentially perform such a role is a *private advisory agency*. Such an agency can act as an overarching body ensuring local participation and value creation during decision-making. These agencies are generally trusted among actors and have the knowledge, capacity, and regional networks to fulfill such a role.

#### 7.1.1.4 National vision

This research recommends the need for a national vision to structure the current UHS-s system and align actors. To further establish this recommendation's intention, a concrete description of what this national vision must entail will be given. The **national vision must consist of two parts: one part must be installed at the back-end while the other must be installed at the front-end.**

*Back-end: A shared understanding of (local) norms, values and participation among all actors*

*Front-end: An assessment framework on the spatial placement of UHS-s project*

The *back-end* part of the vision focuses on the installment of the uncovered norms and values. By incorporating these norms and values into the vision, actors must abide by them upon entering the decision-making process. Also, a concrete interpretation of the contents of local value and local participation should be established in this vision. When common grounds on these topics at the back-end have been established, they can be installed into the project procedure by extending the current institutional boundaries. The *front-end* part of the vision focuses on creating an assessment framework that details the locations where UHS-s projects must be realized. Central spatial planning takes away doubt and allows actors on all scales to anticipate. It creates a frame of reference for traceability of national decisions, clarifying the degree of participation of actors within the decision-making process while also strengthening the norms and values installed at the back-end.

Together these parts will form a national vision that integrates the recommendations of this research. From this vision, national and decentralized policies can be developed to align the spatial scale. Ultimately strengthening the project procedure and creating a more inclusive decision-making process.

## 7.1.2 Theoretical recommendations

### 7.1.2.1 Comparable research setting

This research's proposed conclusions and recommendations are expected to extend beyond the UHS-s system in terms of the corresponding technical and institutional settings. **The findings of this research could potentially be applied in comparable settings.** The Surroundings Act and the project procedure will become relevant to almost every project in the living environment, ranging from small-scale municipal projects to national energy projects. In these settings, *a similar playing field of actors* can be recognized, consisting of competent authority, operators and participants. Moreover, the transition from fossil fuels to renewable energies will significantly impact the living environment. Windfarms, Solar parks, and other forms of renewable energies directly affect residents in their daily lives similarly to UHS-s. To realize these projects, operators must also create trust and operationalize local value via participation. It can be assumed that *similar value dimensions play a role* in these projects.

Therefore, it is recommended that the findings of this research, the uncovered value dimensions, and corresponding actor perspectives are used to analyze the decision-making process of new energy projects that potentially significantly impact residential areas. New actor perspectives can be identified by incorporating the norms and values into the decision-making process. To facilitate the analysis, applying the Value Analysis Framework in these settings is recommended, providing structure for the conception of the value dimensions. When the decision-making process is improved or similar value dimensions are uncovered, *it could serve as a validation* of the findings and framework of this research.

### 7.1.2.2 UHS-s setting

In terms of the UHS-s setting, a recommendation for further research is to **conduct case studies with the findings of this research.** The findings of this research could be validated by analyzing *a real-life decision-making process* using the proposed Value Analysis Framework. The framework performs well if similar value dimensions are captured in the setting. It also would mean that the uncovered value dimensions are both theoretically at play and in practice. In addition, the uncovered *value dimensions* and corresponding findings *should be applied to an actual decision-making process* of a UHS-s project. If an inclusive decision-making process can be achieved by extending the institutional boundaries of the project procedure to include the identified norms and actor perspectives, the research findings and practical recommendations will be validated.

## 7.2 Discussion

### 7.2.1 Reproducibility

The most apparent limitation of this research relates to its reproducibility of this research. This research is qualitative, making the findings unique to the research process. Different results will likely be found if another individual conduct the same research at a different time. This is related to the subjective nature of this research and the difference in the timeframe.

### 7.2.1.1 Subjectivity

This research's subjective nature can be appropriated for *two reasons*. Each separately influences the subjectivity, as is frequently the case in qualitative research. First and foremost, although the interviews follow an interview guide to ensure each interviewee touches upon the same general topics. The interviews are semi-structured, purposely leaving room for interpretation to allow interviewees to express their views and potentially elaborate on their perspectives on specific topics. These expressed opinions following the **perspective of an interviewee are subjective in nature**. Each interviewee naturally has stronger feelings towards a particular aspect of the UHS-s debate as they are more closely involved in that matter. This notion is visualized in [Figure 11](#), [Figure 12](#), and [Figure 13](#). These figures showcase how different actor types express more opinions on certain norms. For example, [Figure 12](#) highlights how arguments related to the norm of value creation are predominantly expressed by participants. These actors are the recipients of value creation and are logically drawn to express arguments about this norm. Consequently, actors express a subjective opinion that corresponds to their interpretation of the UHS-s debate, extending to the subjective nature of this research.

Secondly, this research is a product of the performance of the researcher. The personal nature of interviews is enlarged because the **researcher's interpretation of the interviews is also subjective**. The researcher must instinctively evaluate expressed arguments of actors and place them in the debate according to their relevance. The frame of reference helps the researcher in this evaluation by installing a sense of objectivity in terms of the proportional division of arguments within the debate. However, the nuances of expressed arguments of actors in a particular position must be assessed for importance by the researcher. The researcher must create an objective picture of the debate and apply relevant weight to expressed arguments. In addition, the questions asked during the interview are also a product of the researcher's interpretation. Following the literature research, the researcher decides the relevant topics to discuss during the interview. Together, these two reasons make up for the subjective nature of this interview. The researcher must create a complete and objective picture of the UHS-s debate from all the subjective arguments expressed during the interview. The researcher assesses these arguments by placing them along the theoretical axis and aggregating them into the value dimension. However, this assessment will always contain the subjectivity of the researcher.

### 7.2.1.2 Timeframe

The second limitation that impacts this research's reproducibility relates to the debate's changing timeframe. **Value dimensions are operationalized differently by each actor and change over time**, as described by an expert of GovernEUR below.

*Expert (GovernEUR): Value change can be rapid. For example, energy independence is a value that actors find increasingly more critical because of the geopolitical situation involving the war in Ukraine.*

Because of our energy dependence on Russia, actors re-evaluate the value dimensions of energy security, creating a shift in the status quo and the operationalization of the value. Actors now re-consider increased gas extraction from the Groningen gas fields to overcome this energy dependence on Russia. This phenomenon must be considered in this research setting and can be characterized by the changing timeframe in the value dimensions and actor perspectives of this research. This phenomenon is *most apparent* when considering the value dimension of *distributive justice* in the Groningen natural gas extraction setting. For years actors have deemed the natural gas extraction of national interest and discarded regional and local interests. However, in recent years higher-scale actors, mainly due to public pressure, have reconsidered the operationalization of distributive justice. This has changed the value dimension from predominantly being

based on national interest to considering regional and local interests. By placing more emphasis on cost-benefit consideration as well as value creation and saturation of the region. This *shift has caused a new status quo* in which actors believe in fading out natural gas extraction in Groningen and creating regional value for this region. This newly operationalized perception of distributive justice also becomes apparent in the case of UHS-s. With UHS-s potential largely concentrated in the northern Netherlands, all actors' express opinions on the need to highlight the regional benefit of UHS-s projects. If the regional value cannot be shown, actors strongly believe in saturation of the region followed by heavy resistance to UHS-s projects. As depicted in the energy independence example, this *operationalization is fluid* and may change again over time when different norms become more dominant in the eyes of involved actors.

This fluid nature of the operationalization of value dimensions entails that the *findings of this research are merely a perception at the current point in time*. If this research were to be repeated in two years, the results could potentially be completely different due to the re-evaluation of the value dimensions of this research. Nevertheless, it is believed that the findings of this research will hold within a reasonable timeframe.

### 7.2.2 Actor selection

The analysis of this research is based on interviewing a total of seventeen individuals. The corresponding conclusion and recommendation are also based on the opinions of these individuals. Of these seventeen individuals, several identify with the same actors but on a different spatial scale. Effectively thirteen actors were interviewed in total. These actors ranged from independent experts, various governmental agencies, the competent authority, the most significant involved operator, NGOs, waterboards, and decentralized governments. Even though a substantial portion of involved actors has been interviewed, due to the timeframe of this interview, *not all system actors could be included*. Based on the institutional literature, the most prominent representatives per actor type were selected.

Participants were represented by NGOs, decentralized governments, and waterboards. It may be assumed that these actors represent the interest of the public and, thereby, that of residents. Based on their argumentation, norms and value dimensions were formed, leading to conclusions directly impacting residents. Within this research, it was formulated that these conclusions and recommendations will lead to an inclusive decision-making process regarding the needs of these residents. A limitation of this research is that these **claims on inclusive decision-making and the operationalization of local value for residents were not based on the actual opinion of residents** but the opinion of formally appointed representatives. Although these representatives intend to act in consideration of residents, it cannot be ensured that their choices and views fully align with that of residents. The interviewed representatives possess a formal power that is not installed upon the residents. This legal power potentially impacts their judgment, shifting their perspective away from residents' perspective.

It must be stated that *a qualitative study must always select actors*. Naturally, this selection creates a theoretical environment that is not perfectly comparable to reality. In this built theoretical environment, the research findings are simply an operationalization of reality. The results try to approach reality to its fullest but will never truly grasp reality. This impression most notably holds for the residents' perspective, offered through participant representatives. The theoretical *concept of publicness* supports this notion, conceptualized as the understanding of public goods or public interest (Pesch, 2008). Pesch (2008) states how an inconsistent conceptual framework constitutes public administration. In this research, publicness entails how claims are made that operationalize inclusive decision-making and local value for the public. Still, these claims are supported through a *potential inconsistent conceptual understanding of public needs*.

Therefore, it should be reflected upon the limitation installed within actor selection and the operationalization of the needs of residents within this research.

### 7.2.3 Methodological limitation

The *qualitative approach* of this research provided *certain freedom to combine conceptual theories* and operationalize them into a framework. The proposed Value Analysis Framework was tested through interviews, offering different actor perspectives and opinions. This approach allowed to generalize expressed arguments into ten norms and three value dimensions. However, the choice for such a qualitative approach also has methodological limitations.

First and foremost, the Value Analysis Framework simply grouped and operationalized the proposed conceptual theories. It, however, does not theoretically ground that these theories can be integrated. Therefore, the *Value Analysis Framework must still be theoretically confirmed* before it may be classified as a theoretical framework.

Secondly, the value dimensions were aggregated from a total amount of 218 arguments. The value of procedural justice received the most arguments at 86, with the norm of communication received the most at 36. Although these numbers are adequate for sensible qualitative data analysis, *more data inputs would be needed to conduct a statistical analysis*. If the value conception and correlation between norms could be verified through statistical representation, the identified values would be validated, strengthening the findings.

Another methodological limitation is that the *results are only tested by cross-referencing with literature and the argumentation of other interviewees*. The timeframe of this research and the early stage of UHS-s in the Netherlands did not allow cross-referencing the research findings with a case study. If the Value Analysis Framework and the research findings were to be applied to an actual UHS-s decision-making process and similar results would be achieved, this research and its conclusions would be verified further. If the value dimensions and the corresponding findings of this researcher were confirmed by statistical analysis and a case study, the research findings would be strengthened and classified as a closer representation of reality.

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## Appendix A.

### Interviewees

Initials	Organization	Function
E.W.	TNO	Researcher Energy & Law
M.D.	GovernEUR	Senior Advisory Researcher
M.T.	GovernEUR	(Transition) Researcher
M.R.	Public Mediation	Public Policy Mediator
R.C.	Ministry of EZK	Board Member
M.B.	Gasunie	Surroundings Manager
H.K.	Mijnraad & Waterschap Zuiderzegebied	Board Member & Chair
B.S.	Ministry of EZK	Senior Policy Advisor Northern Netherlands
H.P.	RVO	Senior Advisor Energy
H.K.	Waterschap Hunze en Aa's	Director
P.R.	GGB	Board Member
H.R.	Stut-en-Steun	Secretary
J.L.	NMF Groningen	Director
S.Z.	Energystock	Surroundings Manager
J.M.	Gemeente Enschede	Senior Policy Advisor
J.R.	Gemeente Enschede	Senior Policy Advisor
J.L.	Gemeente Overijssel	Policy Developer

Table 7: All seventeen interviewed individuals

## Appendix B.

### Interview Guide

#### **Introduction:**

Introduce the research topic, the current state of affairs within the research and what is asked from this interview. Also mention that all data will be kept anonymous and if quotes are used, the person will be informed and asked for consent

#### **Opening questions:**

The first set of questions should be broad questions to put the interviewee at ease and to encourage him/her to give their perspective.

- What do you think of the course of the decision-making process (in which you are involved as a party/in general)
  - and the participation process?

#### **Middle part:**

After you determine that you are listening, the next section asks more detailed questions that help you answer specific research questions for the main research topic.

- Do you think that the interests of EZK and the initiator are paramount in the decision-making process, which interests do they put first?
  - Do you have confidence that the ..... takes your interests into account in the decision-making process, which interests do, and which do not? (Initiator, EZK, Municipality, NGO, Citizens' Council)
  - Do you think it is possible to get a better balance in this, how is that possible?
- What is your experience with the current National Coordination Scheme?
  - Do you think this will change with the arrival of the Environmental Act and the new project procedure?
  - What do you think of the current and future role of the Ministry of EZK within the process as a competent authority?
- What were the most important common interests and values in the process?
  - In your experience, as the process progressed, has there been a change in how certain parties acted towards common interests and values?

#### **Closing section:**

Ask questions for anything that is still unclear and ask questions that consider theories used in the research.

- Do you think the EZK's facilitating role in the process is good or should they move more to the foreground?
- Do you think that national and regional policy/ zoning plan should be more aligned and coordinated?
- Should local parties have more say or does that make the process too complicated?

## Appendix C.

### First-order Arguments

#### ATLAS.ti Report

#### Quotations grouped by Codes

Report created by Yme Sanderse on 17 Aug 2022

- BS Als wij nu in de rol van de gasunie zouden stappen in het organiseren van informatiebijeenkomsten voor de omgeving in dit stadium daar hebben we kans dat het juist de negatieve weerslag heeft op de goede relatie die de Gasunie nu zelf heeft opgebouwd met die omgeving.

1 Quotations:

- ☺ 1:108 ¶419, Als wij nu in de rol van de gasunie zouden stappen in het organiseren van informatiebijeenkomsten vo... in Interview Transcripts .docx

- BS Dat EZK onderbemand is, dat onderschrijf ik meteen. hebben wij ook gewoon meer mensen nodig om dat werk op een kwalitatief goede manier te kunnen doen.

1 Quotations:

- ☺ 1:112 ¶435, wij onderbemand zijn dat onderschrijf ik meteen dat wij zijn op dit moment nog in Interview Transcripts .docx

- BS Dat is een experiment daarmee de regie uit handen geven als rijk en de regie neerleggen bij de regio. Daar zit een Sturings filosofie achter waarbij we duidelijk het omslagpunt zien van centrale regie dat decentrale regie en daar bewust voor gekozen hebben

1 Quotations:

- ☺ 1:109 ¶425, at is een experiment en omdat wij daarmee de regie uit handen geven als rijk en de regie neerleggen... in Interview Transcripts .docx

- BS Gasunie is daar al een jaar of 10 exploitant van de aardgas opslag. en communiceert daar heel veel over met de omgeving. ik heb dat allemaal het afgelopen jaar voortdurend zorgvuldig gevraagd bij de gasunie wat zij doen, hoe zij dat doen, wat de respons is uit de omgeving. Ik ben onder de indruk van de kwaliteit van hun relatiemanagement met de omgeving.

1 Quotations:

- ☺ 1:104 ¶415, gasunie is daar al een jaar of 10 exploitant van de aardgas opslag. en communiceert daar heel veel o... in Interview Transcripts .docx

- BS het RVO heeft meer expertise in huis en daar zouden wij zeker af en toe meer gebruik van kunnen maken. dan gaat het echt ook om het de ervaring bij rvo in omgevingsmanagement het organiseren van overleg processen in de regio of het organiseren van bijeenkomsten met omwonenden voor specifieke doelen.

1 Quotations:

- ☺ 1:114 ¶436, vo heeft meer expertise in huis en daar zouden wij zeker af en toe meer gebruik van kunnen maken. da... in Interview Transcripts .docx

- BS Ik vind ook participatie eigenlijk niet een heel juiste term omdat participatie suggereert dat mensen gelijkwaardig meebeslissen in het project. Terwijl een project voor een belangrijk deel op technische factoren invulling krijgt aan de omgeving

1 Quotations:

- ☺ 1:105 ¶416, k vind ook participatie eigenlijk niet een heel juiste term omdat participatie suggereert dat mensen... in Interview Transcripts .docx

- BS Maatschappelijke participatie vanuit inwoners vanuit zo'n regio is een onderdeel geweest van het proces Dat betekent dat we voor de RES nog steeds samen met de Regio's aan het bekijken zijn hoe wij samen tot een uiteindelijk ja uiteindelijk een landelijke aanpak van de uitvoering van de verschillende RES plannen kunnen komen.

1 Quotations:

- ☺ 1:111 ¶430 – 431, Maatschappelijke participatie vanuit inwoners vanuit zo'n regio is een onderdeel geweest van het pro... in Interview Transcripts .docx

- BS Ongeveer een jaar voordat wij formeel starten met de procedure dat vinden wij al met het vooroverleg met een initiatiefnemer dat is voor dit project niet verder anders dan voor veel andere projecten. we willen weten dat de initiatiefnemer in staat is om het project technisch en financieel goed te gaan uitvoeren.

1 Quotations:

- ☺ 1:103 ¶414, us ongeveer een jaar voordat wij formeel starten met de procedure dat vinden wij al met het voorover... in Interview Transcripts .docx

- BS Over Windpark N33 daar hebben wij achteraf al geconcludeerd dat het betrekken van de omgeving veel beter had moeten en het gevoel dat bij de omgeving is ontstaan is ten dele te wijten aan onze slechte communicatie met de omgeving waarbij ze te laat zijn betrokken en het gevoel hebben gekregen dat ze niet serieus worden genomen. De weerstand was al ernstig gepolariseerd

1 Quotations:

- 1:97 ¶402, daar hebben wij achteraf al geconcludeerd dat het betrekken van de omgeving veel beter had gemeeten... in Interview Transcripts .docx
- BS waarbij wij als rijk hebben gemerkt dat onze invloed maar heel klein is en dat de invloed van regionale media heel groot is. Je zou kunnen zeggen dat op formeel institutioneel vlak heeft het rijk heel veel invloed maar in de informele kaders hebben ze heel weinig invloed
- 1 Quotations:
- 1:99 ¶404 – 405, waarbij wij als rijk gewoon geen ja geen geen middelen hebben maar anders dan het verzoek om te kijk... in Interview Transcripts .docx
- BS We wel willen werken zoveel als mogelijk is volgens datzelfde diezelfde sturingsfilosofie decentraal maakt. Als we kijken naar opslagcapaciteit voor duurzame energie willen wij de invulling van die opslagcapaciteit zoveel als mogelijk is gaan vormgeven in overleg met de regio's waar die opslag kan plaatsvinden.
- 1 Quotations:
- 1:110 ¶427, Maar waarbij wij wel willen werken zoveel als mogelijk is volgens datzelfde diezelfde sturingsfiloso... in Interview Transcripts .docx
- BS wij hebben de gewoonte om in een vroeg stadium de omgeving zo goed mogelijk te betrekken. zowel de informatievoorziening naar omwonenden als op regionaal bestuurlijk niveau en regionaal bestuurlijk niveau
- 1 Quotations:
- 1:100 ¶407, wij hebben de gewoonte om in een vroeg stadium de omgeving zo goed mogelijk te betrekken. zowel de i... in Interview Transcripts .docx
- BS Wij zaten inderdaad toen al met een zo gepolariseerde omgeving dat het beeld in de media heel sterk beheerst werd door de tegenstanders die de media kanalen heel erg goed hebben benut
- 1 Quotations:
- 1:98 ¶403, maar wij zaten inderdaad toen al met een zo gepolariseerde omgeving dat het beeld in de media heel s... in Interview Transcripts .docx
- BS wij zijn als faciliterende overheid medeverantwoordelijk voor een goed participatieproces en wij hebben en daar ook een actieve rol in. wij zijn complementair aan elkaar maar wij zijn beiden samen verantwoordelijk voor een goed resultaat namelijk een goed proces van maatschappelijke betrokkenheid.
- 1 Quotations:
- 1:102 ¶411, wij zijn als faciliterende overheid medeverantwoordelijk voor een goed participatieproces en wij heb... in Interview Transcripts .docx
- EW Als de politieke noodzaak doordringt, dan gaat men wel lopen. Maar die wordt nog niet gevoeld.
- 1 Quotations:
- 1:16 ¶42, Als de politieke noodzaak doordringt, dan gaat men wel lopen. Maar die wordt nog niet gevoeld. in Interview Transcripts .docx
- EW Bij UHS-s is er ook geografische beperking. Als je alles het goed hebt doorgeakkerd, ja, dan dan. Dan kan je op een gegeven moment zeggen, Dit is gewoon De locatie en we hebben hem gewoon nodig. Maar dat kan EZK nu ook niet zeggen, want die heeft dat helemaal Niet doorgeakkerd met die provincies.
- 1 Quotations:
- 1:20 ¶47, Dan blijf je nog die dat die geografische beperking die je hebt, dat er maar gewoon beperkt aantal p... in Interview Transcripts .docx
- EW Dat is niet hetzelfde als participatie. Het kan wel het resultaat zijn van de participatie procedure dat je de uitkomst op Dat er een soort van financiële vergoeding richting de omgeving ging.
- 1 Quotations:
- 1:12 ¶33, Dat is niet noodzakelijkerwijs hetzelfde als bijvoorbeeld inspraak en participatie. En dat kan dat k... in Interview Transcripts .docx
- EW De besluitvorming rond hoe die cavernes worden ingezet, nog gewoon nog niet goed georganiseerd is dat er geen goed afwegingskader ligt voor nationale en regionale overheden. Kijk bij wind op land hebben we dat bijvoorbeeld wel
- 1 Quotations:
- 1:7 ¶19, Dat die besluitvorming rond hoe die cavernes worden ingezet, nog gewoon nog niet goed georganiseerd... in Interview Transcripts .docx
- EW Doe niet alsof Mensen inspraak hebben over dingen waar ze geen Inspraak over hebben.
- 1 Quotations:
- 1:21 ¶49, Doe niet alsof Mensen inspraak hebben over dingen waar ze geen Inspraak over hebben. in Interview Transcripts .docx
- EW Dus aan de ene kant wil je Natuurlijk een wettelijk kader hebben dat niet de rigide is, tegelijkertijd wil je het ook niet te vrijblijvend maken
- 1 Quotations:
- 1:4 ¶14, Dus aan de ene kant wil je Natuurlijk een wettelijk kader hebben dat niet de rigide is, hè? Dat alle... in Interview Transcripts .docx
- EW Dus dat nationale beleid is niet uitgezet, dat is er gewoon niet eigenlijk.
- 1 Quotations:
- 1:8 ¶20, Dus dat nationale beleid is niet uitgezet, dat is er gewoon niet eigenlijk. in Interview Transcripts .docx
- EW EZK heeft wel de verantwoordelijkheid voor de procedure met de omgeving Als bevoegd gezag. Maar zij pakken die rol niet echt. Ze duwen hem weg naar een commerciële partij en die doet maar wat. EZK moet zich inclusiever gedragen in het hele proces
- 1 Quotations:

☺ 1:22 ¶ 52, zij hebben wel de verantwoordelijkheid voor de procedure, namelijk de procedure met de omgeving Als... in Interview Transcripts .docx

- EW Het zou wenselijk zijn als EZK iets meer begeleidend zich zou opstellen In het traject

1 Quotations:

☺ 1:19 ¶ 47, et zou denk ik wenselijk zijn als EZK iets meer begeleidend zich zou opstellen In het traject in Interview Transcripts .docx

- EW regionaal beleid is vanuit de provincies is niet de opdracht, maar die voelen het wel aankomen. Dus, eigenlijk nemen ze dan op als een soort bescherming tegen operators

1 Quotations:

☺ 1:17 ¶ 44 – 45, regionaal beleid is vanuit de provincies is niet de opdracht, maar die voelen het wel aankomen. Die... in Interview Transcripts .docx

- EW Tegelijkertijd belast je dus zo'n een individueel traject met enorme politieke vragen, want die zijn nog niet beantwoord vanuit de politiek. Omdat ze hun vingers er niet aan willen branden.

1 Quotations:

☺ 1:15 ¶ 42, Tegelijkertijd belast je dus zo'n een individueel traject met enorme politieke vragen, want die zijn... in Interview Transcripts .docx

- EW Van nationaal niveau tot een specifiek traject dat wordt belast met alle vragen. Aan de ene kant wil je iets opzetten waardoor je met die omgeving het gesprek aan kan gaan. Aan de andere kant moeten we op hoger niveau een afwegingskader maken over hoe je omgaat met die cavernes.

1 Quotations:

☺ 1:6 ¶ 17, dus je gaat nu heel erg van het Nationaal niveau van. Oké, zoutcavernes zijn belangrijk tot een spec... in Interview Transcripts .docx

- EW Voor Nieuwe commerciële partijen is het moeilijk om te begrijpen hoe belangrijk het betrekken van de omgeving is. Voorbeeld is CORE Energy

1 Quotations:

☺ 1:11 ¶ 29, Dat is dat dus heel moeilijk voor zo'n commerciële partij. En zeker Als het gaat om nieuwe commerciële... in Interview Transcripts .docx

- EW We willen ons er niet aan Branden vanuit de politiek. Dus die willen eigenlijk dat de commerciële partijen het regelt met de omgeving en Als het dan allemaal goed geregeld is, dan zetten zij wel een stempel

1 Quotations:

☺ 1:14 ¶ 42, Er is een soort van: We willen ons er niet aan Branden vanuit de politiek. Dus die willen eigenlijk... in Interview Transcripts .docx

- EW: De project procedure biedt de handvaten om heel tijdig al te beginnen In het traject. Maar hoe je Het gesprek aangaat met de omgeving, Dat is heel erg opengelaten.

1 Quotations:

☺ 1:10 ¶ 28, De project procedure biedt de handvaten om heel tijdig al te beginnen In het traject. Dat kon je ook... in Interview Transcripts .docx

- EW: Je zou winningen opslag vergunning willen koppelen. Als rijksoverheid zou je in de winningsvergunning aanwijzingen willen meenemen over toekomstige gebruiken of hoe er gewonnen wordt. Naar de lokale bevolking moet je laten weten, we gaan winnen en opslaan.

1 Quotations:

☺ 1:9 ¶ 25, maar die zou je wel eigenlijk in dit geval meer willen koppelen. Dat zag je eigenlijk willen, want j... in Interview Transcripts .docx

- HK 2 Vroeger kenden we de Tweede, de Derde, de Vierde nota ruimtelijke ordening. Daarin werden keuzes gemaakt. Die keuzes worden niet gemaakt. En vervolgens zie je dus dat een provincie moet dan een omgevingsvisie maken, die lopen ook om de hete brij heen. Dan vervolgens in het kader van de omgevingswet moet de gemeente ook een omgevingsvisie maken, en eigenlijk doen die ook geen uitspraken. En Weet je, dat is participatie op nationaal niveau

1 Quotations:

☺ 1:149 ¶ 651, En eigenlijk vind ik, het Rijk zou daar het voortouw in moeten nemen. Vroeger kenden we de Tweede,... in Interview Transcripts .docx

- HK Als het gewoon volgens de wetgeving correct is en het technisch gezien Klopt, dan komt vanuit de mijnraad een, ok. De mijnraad is geen spreekbuis van ongenoegen van de omgeving

1 Quotations:

☺ 1:92 ¶ 363, Als het gewoon volgens de wetgeving correct is en het technisch gezien Klopt, dan komt vanuit de mij... in Interview Transcripts .docx

- HK Als ik bij de RESen kijk. Daar wordt bijna een vorm van concurrentie gecreeerd. Daar ontstond een soort ideeën van ja, maar als wij meer aanbieden, dan hoeft iemand anders minder te doen.

1 Quotations:

☺ 1:85 ¶ 348, Als ik bij de ressen kijk. Dat ik daar toch echt wel een beetje ingewikkeld vind, is dat daar? Als i... in Interview Transcripts .docx

- HK Dat is bewust in de Omgevingswet redelijk vorm vrijgelaten omdat je zo de verantwoordelijkheid voor het inrichten van participatieproces neerlegt waar het hoort, namelijk In de gebieden bij de betrokken overheden.

1 Quotations:

☺ 1:80 ¶ 335, Dat is In de Omgevingswet redelijk vorm vrijgelaten is Alleen maar n. Dat is vrij bewust gedaan Omda... in Interview Transcripts .docx

- HK De mijnbouwwet kijkt vooral naar de financiële haalbaarheid van de winning of de opslag. Maar de hele inpassing boven en de fysieke veiligheid bovengronds en het hele proces wat daarvoor nodig is, dat staat nog een beetje in kinderschoentjes.

- 1 Quotations:
- 1:88 ¶ 352, mijnbouw wens klassiek gezien kijkt vooral dat het kijkt vooral naar de nou ja, zeg Maar de fin... in Interview Transcripts .docx
- HK Dus in die zin is de Omgevingswet een soort lege huls. Omdat hij Alleen maar een soort instrumentarium aanreikt waarmee je als bestuur, gemeente, provincie, Waterschap Rijk een fatsoenlijk besluitvormingsproces kan organiseren. Inhoud komt Natuurlijk pas via het initiatief en de aanvullingswet
- 1 Quotations:
- 1:77 ¶ 327, Dus in die zin is de Omgevingswet. Eigenlijk een soort lege huls. Omdat hij Alleen maar een soort in... in Interview Transcripts .docx
- HK Eigenlijk zou het fijn zijn als die eerste volgende aanvullingswet de mijnbouwwet onderbrengt in de Omgevingswet.
- 1 Quotations:
- 1:79 ¶ 332, eigenlijk zou het fijn zijn als die eerste volgende aanvullingswet de aanvullingswet mijnbouw hoort... in Interview Transcripts .docx
- HK En dan krijg je dingen als in Zeewolde dat de gemeente iets wil en datacenter en dat dan vanuit het rijk 3 verschillende sturingen op zo'n gemeente afkomen. Rijksvastgoedbedrijf als zijn grond niet wil verkopen mysterie van Landbouw dat zegt Van jongens, Wij hebben hier goede landbouwgrond in, moeten we niet, voorkwam ze leuk
- 1 Quotations:
- 1:81 ¶ 339, Er is niet een gemiddeld gevoel hier In de In de polder een wat je wel merkt is dat dat dat politici... in Interview Transcripts .docx
- HK Er is niet een gemiddeld gevoel hier In de polder. Wat je wel merkt is dat dat dat politici bestuurders toch elke keer aanvoelen van goh tot hoever zou je hier nog kunnen gaan of niet, hè?
- 1 Quotations:
- 1:96 ¶ 378, Er is niet een gemiddeld gevoel hier In de In de polder een wat je wel merkt is dat dat dat politici... in Interview Transcripts .docx
- HK Het heeft niks met participatie te maken, Maar het wel of niet hebben van een visie op rijksniveau dat dermate onderscheidend is dat je er vervolgens ook wat mee kunt op regionaal dan wel lokaal niveau.
- 1 Quotations:
- 1:82 ¶ 341, Maar dat dat dat heeft niks met participatie te maken, Maar dat heeft te maken met met met met een e... in Interview Transcripts .docx
- HK Ik durf de stelling wel aan dat die Omgevingswet excellent in elkaar geknutseld is, maar valt of staat bij visie van bestuurders op nationaal, regionaal en lokaal niveau
- 1 Quotations:
- 1:83 ¶ 341, k durf de stelling wel aan dat die Omgevingswet excellent in elkaar geknutseld is, maar valt of staa... in Interview Transcripts .docx
- HK In de ruimte, heb je winnaars en verlies. In deze regio zijn er een aantal initiatiefnemers ingestapt op een heel gunstig moment Omdat ze het kapitaal hadden. Daardoor heb je een beperkt aantal winnaars en een groot aantal gevoelloos verliezers.
- 1 Quotations:
- 1:95 ¶ 376, n de ruimte, heb je winnaars en verlies. In deze regio zijn er een aantal initiatiefnemers ingestapt... in Interview Transcripts .docx
- HK In het geval waterstofopslag, moet je ook wel goed kunnen uitleggen Waarom perse die locatie op dat punt gewoon echt heel belangrijk is voor dat nationale belang, dus Ik hoop Maar dat EZK Zijn huiswerk op dat punt doet.
- 1 Quotations:
- 1:90 ¶ 358, Als je een belang hebt, moet Je ook kunnen aantonen dat ook. Echt nodig is, kijk op het moment. Dat... in Interview Transcripts .docx
- HK Ruimte voor de rivier, Maar dit vond ik wel een hele mooie manier waarbij je als rijk wel je verantwoordelijkheid neemt dat je Mensen niet op pad stuurt met een onmogelijke opgave. Dat je weet dat het kan Binnen tijd, geld en kwaliteit, maar je geeft tegelijkertijd ruimte aan de hoek kant, Maar dat is ook weer geen onbeperkte ruimte.
- 1 Quotations:
- 1:84 ¶ 347, Maar dit vond ik wel een hele mooie manier waarbij je als rijk wel je verantwoordelijkheid neemt dat... in Interview Transcripts .docx
- HK Wat volgens mij heel belangrijk is, is dat dat we sowieso de feiten heel goed op een rij hebben over Waterstofopslag. En dat daar ook gewoon goede Normen op zijn. Dat er hele goede samenhang is tussen ondergrond en bovengrond
- 1 Quotations:
- 1:86 ¶ 350, at volgens mij heel belangrijk is, is dat dat we sowieso de feiten heel goed op een rij hebben, dat... in Interview Transcripts .docx
- HK2 er zijn uitstralingseffecten. Als wij in een kommetje de waterstand tachtig centimeter verlagen, dan zal dat grondwater aantrekken van buiten het gebied. Want dat is immers de laagste plek. Dus het stroomt dan naar dat. Dus waarschijnlijk heb je ook wat grondwaterstand veranderingen in de omgeving.
- 1 Quotations:
- 1:148 ¶ 647, er zijn uitstralingseffecten. Als wij in een kommetje de waterstand tachtig centimeter verlagen, dan... in Interview Transcripts .docx
- HK2 EZK zou regelen dat er niet eerder gewonnen mocht worden dan dat er overeenstemming was met het waterschap over compenserende werken die uitgevoerd moesten worden. En wie die zou gaan betalen. Toen puntje bij paaltje kwam toen hebben ze het eruit gehaald. Ze durfden het juridisch niet. Ik vind niet dat je een waterschap of een gemeente in de positie moet manoeuvreren dat ze zelf moeten onderhandelen over die situatie. Dat zouden ze in hun vergunning traject gewoon moeten regelen. Hierdoor krijgt waterschap een slechte reputatie bij burger. 'Kijk ze werken voor EZK en niet voor ons'
- 1 Quotations:

- was... in Interview Transcripts .docx
- ⊕ 1:137 ¶ 605, EZ zou regelen dat er niet eerder gewonnen mocht worden dan dat er na dan dat er overeenstemming
  - HK2 Goede participatie is veel meer een proces dan dat je van tevoren kunt zeggen, je moet het daarover hebben. Want dan kun je het wel geregeld hebben maar dat wil helemaal niet zeggen dat die mensen het gevoel hebben dat ze gehoord zijn. Je moet er aan de voorkant eerlijk en duidelijk voor zijn.
  - 1 Quotations:
  - ⊕ 1:140 ¶ 607 – 608, aar moet je aan de voorkant eerlijk over zijn. Maar goede participatie is veel meer een proces dan d... in Interview Transcripts .docx
  - HK2 Het gelijkheidsbeginsel dat is echt heilig voor de overheid. Ik denk het gaat voor mij veel meer over uitlegbaarheid. En op het moment dat er twee dorpen zijn die evenveel last hebben van een gaswinlocatie of van een gasopslag. Dan is het raar dat er een groot verschil zit in hoe je met ene dorp omgaat of met het andere dorp omgaat.
  - 1 Quotations:
  - ⊕ 1:152 ¶ 661, et gelijkheidsbeginsel dat is echt heilig voor de overheid. Ik denk het gaat voor mij veel meer over... in Interview Transcripts .docx
  - HK2 Het Rijk zou daar het voortouw in moeten nemen.
  - 1 Quotations:
  - ⊕ 1:149 ¶ 651, En eigenlijk vind ik, het Rijk zou daar het voortouw in moeten nemen. Vroeger kenden we de Tweede,... in Interview Transcripts .docx
  - HK2 Ik denk aan de manier waarop het in gestoken wordt, aan de inspanning die je gegeven hebt, of je echt geluisterd heb ja dat je daarop dus wel degelijk kunt beoordelen of de participatie goed is vormgegeven.
  - 1 Quotations:
  - ⊕ 1:143 ¶ 621, ik denk aan de manier waarop het in gestoken wordt, aan de inspanning die je gegeven hebt, of je ech... in Interview Transcripts .docx
  - HK2 Ik heb in de adviescommissie voor de minister gezeten voor de omgevingswet. En daar hebben wij nadrukkelijk aangegeven aan de Tweede Kamer, blijf met je vingers af van hoe je die participatie regelt. Want dan worden het afvinklijstjes. En dat is geen enkele garantie voor een goede participatie
  - 1 Quotations:
  - ⊕ 1:139 ¶ 607, k heb in de adviescommissie voor de minister gezeten voor de omgevingswet. Ook met Hetty samen. En d... in Interview Transcripts .docx
  - HK2 In schoonebeek werd het door technenuten geregeld. Inmiddels is shell een bedrijf geworden wat alles juridisch afgewikkeld. En als je nou ellende wil hebben dan moet je er een advocaat op zetten. En dat is ook in Groningen gebeurt
  - 1 Quotations:
  - ⊕ 1:146 ¶ 632, Inmiddels is shell een bedrijf geworden wat alles juridisch afgewikkeld. En als je nou ellende wil h... in Interview Transcripts .docx
  - HK2 Je zag dat die streken een hele andere verhouding had met de NAM dan wat er nu in groningen plaatsvindt. Ja, dus lokaal baten tonen helpt. En het hoeft helemaal niet in verhouding te staan. Maar het helpt.
  - 1 Quotations:
  - ⊕ 1:145 ¶ 630, Zo en je zag dat die streken een hele andere verhouding had met de NAM dan wat er nu in groningen pl... in Interview Transcripts .docx
  - HK2 Met de gaswinning destijds. Toen ze begonnen met gasboren waren er een paar lieden hier in de buurt en die riepen als je gas uit de grond gaat halen dan gaat er bodemdaling optreden. Dat is tien, vijftien, twintig jaar lang ontkend. Twintig jaar lang ontkend totdat metingen aangaven dat het niet meer te ontkennen viel. Het zelfde gebeurde aardbevingen
  - 1 Quotations:
  - ⊕ 1:144 ¶ 626, met de gaswinning destijds. Toen ze begonnen met gasboren waren er een paar lieden hier in de buurt... in Interview Transcripts .docx
  - HK2 Vervolgens als je met boeren discussie hebt is Per definitie is het model niet betrouwbaar. Dus de boeren willen een hydroloog die beoordeelt of jullie model klopt. Toen heb ik erin toegestemd zij mochten hydroloog voorstellen en dan gezamenlijk instemmen. Ik heb hoordoor dus geen discussie over de waarheid van het model meer. Hierin is de hydroloog een vorm van participaite.
  - 1 Quotations:
  - ⊕ 1:141 ¶ 611, ervolgens als je met boeren discussie hebt en er zijn modellen in het in het geding. Of het nou over... in Interview Transcripts .docx
  - HK2 Wat je eigenlijk wilt bereiken is dat de omgeving dus lokale overheid én de omwonenden zelf invloed hebben op hoe die op hoe een eventuele compensatie eruit gaat zien. Als je over participatie praat dan moet je niet zeggen van we gaan een dorpshuis voor jullie bouwen. Dan zeggen ze ja maar daar hebben we helemaal geen belang bij.
  - 1 Quotations:
  - ⊕ 1:151 ¶ 658 – 659, Wat ook wel weer moeilijk is want je wilt eigenlijk wil je natuurlijk juist zo doen dat de omgeving... in Interview Transcripts .docx
  - HP Dan moet je echt naar toe, dat er een goede samenwerking komt tussen landelijk EZK en provinciaal. Maar er wordt te weinig met elkaar gesproken. Er is binnenin EZK en binnen de lokale overheid geen instantie die continu in gesprek is met de plaatselijke overheden dit zou RVO eventueel kunnen ondersteunen.
  - 1 Quotations:
  - ⊕ 1:127 ¶ 538, Dan moet je echt naar toe, dat er een goede samenwerking komt tussen landelijk EZK en provinciaal. M... in Interview Transcripts .docx
  - HP Dat is een samenwerking tussen Gasunie, EZK en alle (lokale) partijen die daar nodig zijn en dat en Is een goed inniatief.
  - 1 Quotations:



☺ 1:123 ¶ 520, Dat is een samenwerking tussen Gasunie, EZK en alle partijen die daar nodig zijn. Lokale partijen de... in Interview Transcripts .docx

- HP Dat zal wel is beter mogen, ik merk gewoon dat dat een bepaalde afstand zit. Dat het nog niet goed samenwerkt.

1 Quotations:

☺ 1:121 ¶ 512, Dat zal wel is beter mogen, ben ik heel voorzichtig in, maar die dat dat ik merk gewoon dat dat een... in Interview Transcripts .docx

- HP De samenwerking tussen RVO en EZK wordt steeds beter. Omdat EZK te weinig mensen heeft en eigenlijk wil gebruik maken van de kennis die Er zit bij het RVO. Ze zien meer de kracht in van de RVO als sneller bewegende orgaan.

1 Quotations:

☺ 1:134 ¶ 591, Omdat de EZK te weinig mensen heeft en eigenlijk wil gebruik maken van de kennis die Er zit bij het... in Interview Transcripts .docx

- HP Dus eigenlijk is het project leidend en wordt daarna naar gekeken in plaats van dat het van tevoren In het besluitvormingsproces al wordt opgenomen dat zou je liever andersom zien. Dit valt expliciet op voor waterstof

1 Quotations:

☺ 1:122 ¶ 514 – 516, zoals ook bij Hoogeveen van ze hebben een initiatief. Nu al de woning zijn ze aan het bouwen watersto... in Interview Transcripts .docx

- HP EZK Zou een actievere rol moeten nemen. Omdat zij de genen zijn die de opdracht verstrekken van onderzoek tot uitwerking

1 Quotations:

☺ 1:118 ¶ 486, EZK Zou een actievere rol moeten nemen. Omdat zij de genen zijn die de opdracht versterking verstrek... in Interview Transcripts .docx

- HP Gemeentes leveren ontheffings vergunningen voor Pilots. Dit stimuleert lokale proejcten. Maar als het overgaat naar definitieve uitvoering is er nog te weinig communicatie tussen nationaal en lokaal. Maar Je moet dan wel nadenken van, hoe ga ik zorgen dat het landelijk ondergebracht krijgen.

1 Quotations:

☺ 1:117 ¶ 484, En zolang het Pilot blijft, kon ze voor bepaalde tijd daar een vergunning aan verlenen. Zonder daar... in Interview Transcripts .docx

- HP Ik loop af en toe tegen deze problemen aan. Dan leg ik het neer bij EZK. Daar houdt het ook op want wij zijn uitvoerend orgaan en de oplossing moeten van boven komen. Hier word wel naar geluisterd maar ze hebben te weinig mankracht om dit soort problemen op te lossen.

1 Quotations:

☺ 1:133 ¶ 579, k loop tegen af en toe tegen deze problemen aan En dan leg ik dat wel bij een aantal Mensen binnen E... in Interview Transcripts .docx

- HP Ik verwacht dat daar nog wel problemen komen voor waterstof want het staat nog in kinderschoenen. Dat maakt dat overheden zich daar nog onvoldoende bewust zijn. Waardoor ze niet op een lijn zullen zitten qua beleid, dit kan druk uitoefenen op lokale overheden. Dit probleem zit nog niet genoeg op de voorgrond.

1 Quotations:

☺ 1:132 ¶ 575, ik verwacht dat daaar nog wel problemen komen, Maar het Maar dat met name voor heel waterstof. Dat s... in Interview Transcripts .docx

- HP Ik vind participatie procedure allemaal te traag verlopen. Ik vind dat er tot op heden onvoldoende is meegenomen.

1 Quotations:

☺ 1:115 ¶ 471, Ik vind het allemaal te traag verlopen in Interview Transcripts .docx

- HP Ik vraag me af of Het gaat gebeuren. Het moet meer zichtbaar zijn Wat er gebeurt op dat gebied, ook nationaal. Er is momenteel te veel achterkamertjes bezigheden, terwijl het eigenlijk wel zichtbaar zou mogen zijn.

1 Quotations:

☺ 1:130 ¶ 564, Het heeft mijn wens dat het gaat gebeuren, Maar ik vraag me af of Het gaat gebeuren. Er zal zeker wa... in Interview Transcripts .docx

- HP Je ziet gewoon dat de lokale overheden zit te worstelen. Ze worden er te weinig bij betrokken van hoe gaan we dit oplossen (waterstof) terwijl ze dat wel graag willen.

1 Quotations:

☺ 1:126 ¶ 534, Je ziet gewoon dat de lokale overheden zit te worstelen. Wat geeft ons de landelijke overheid nu als... in Interview Transcripts .docx

- HP Juist ja, ik mer ook dat er een belangenverstrenging zit tussen de verschillende ministeries.

1 Quotations:

☺ 1:131 ¶ 569, Juist, ja dat dat, dat merk ik ook. in Interview Transcripts .docx

- HP Neem het waterstofnetwerk bij Hoogeveen of bij Goeree Overflakkee. Er zijn een aantal projecten waar zij ook de belanghebbende, maar ook de omgeving goed betrekken. Bij Hoogeveen is door de gemeente in samenwerking met Stork een aantal partijen is het initiatief ontstaan en daardoor is het uitgewerkt.

1 Quotations:

☺ 1:120 ¶ 506, Neem het waterstofnetwerk bij Hoogeveen. Daarom daar wordt heel gemeentes in of de hele omgeving bet... in Interview Transcripts .docx

- HP RVO is eigenlijk wat dat betreft ook als uitvoerend orgaan In het team inlichten van lokale partijen. Als een lokale organisatie iets wil. Welke bedrijven hebben hier belang bij in jouw omgeving? Ja en dan zoekt het RVO uit.

1 Quotations:

☺ 1:125 ¶ 529 – 530, RVO is eigenlijk wat dat betreft ook als uitvoerend orgaan In het team inlichten van lokale partijen... in Interview Transcripts .docx

○ HP zoals ook bij Hoogeveen van ze hebben een initiatief. En EZK komt af en toe op bezoek. Maar Die zal ook nu al iemand moeten vrijspelen, om te kijken waar het aan de wetgeving moet voldoen.

1 Quotations:

☺ 1:122 ¶ 514 – 516, zoals ook bij Hoogeveen van ze hebben een initiatief. Nu al de woning zijn ze aan het bouwen watersto... in Interview Transcripts .docx

○ HR (Afhandeling schade EZK - BZK) Dat heeft een jaar 1,5 jaar geduurd voordat ze tot de conclusie kwamen nu zitten we wel met twee heel verschillende grootheden Te werken. Want de minister van EZK was verantwoordelijk voor de gaswinning en de afhandeling van de schade. Hoewel BZK verantwoordelijk was voor alles wat te Maken had met De veiligheid, de versterking, de burger. En, dat betekende dat Zij beide ook De concurrenten naast functie naast zich neerlegden. Ja en dan praten we Met regelmaat over samenwerkingen tussen die partijen. Maar van de grond komen, dat wil niet lukken.

1 Quotations:

☺ 1:178 ¶ 739, at heeft een jaar 1,5 jaar geduurd voordat ze tot de conclusie kwamen van oei. Nu zitten we wel met... in Interview Transcripts .docx

○ HR De omgekeerde bewijslast maakt mensen een stuk rustiger als dat ook werkelijk goed wordt uitgevoerd. Als er geen risico is, kun je rustig zon regeling Vestigen. Als ze zo'n regeling niet willen vestigen, is er dus risico

1 Quotations:

☺ 1:166 ¶ 707, omgekeerde bewijslast. Die maakt dat mensen zich ook een stuk rustiger kunnen voelen Als dat ook wer... in Interview Transcripts .docx

○ HR De provincie Groningen die worstelt er heel erg mee dat het lokale overheden wordt opgedrongen. De burgemeester uit zich daar ook wel eens over.

1 Quotations:

☺ 1:160 ¶ 693, De provincie Groningen zie je dat die worstelt daar heel erg mee van. Ja, het wordt ons opgedrongen... in Interview Transcripts .docx

● HR De RES-regeling is opgezet om je bevolking dingen door de strot kunt drukken, doordat het een lokaal gebeuren is. Als je iets lokaal organiseerd, dan zeg je Veel moeilijker nee.

1 Quotations:

☺ 1:174 ¶ 726, In die zin dat je, eigenlijk je bevolking dingen door de strot kunt drukken, doordat het een lokaal... in Interview Transcripts .docx

○ HR Die lagere overheden, die dus ook volgens de Omgevingswet ineens nu aan zet zijn om dingen te gaan doen zijn vaak ook niet 100% op de hoogte van wat er allemaal precies speelt.

1 Quotations:

☺ 1:159 ¶ 690, ie lagere overheden, die dus ook volgens de Omgevingswet ineens nu aan zet zijn om dingen te gaan do... in Interview Transcripts .docx

● HR Dus je kunt je voorstellen dat de bewoners die met dit verhaal wordt geconfronteerd Van burens van Familie, die zal wel waken In te stemmen met iets dat onder het eigen huis gaat gebeuren met maar geef daar ook bij de zoutwinning.

1 Quotations:

☺ 1:168 ¶ 711, us je Kunt je voorstellen dat de bewoners die met dit dit verhaal wordt geconfronteerd Van burens van... in Interview Transcripts .docx

○ HR En Als je dan volgende week aan komt zetten met zoutcaverne opslag, dan? Nou ja, ze staan al met 10 nul achter in feite

1 Quotations:

☺ 1:163 ¶ 702, En Als je dan volgende week aan komt zetten met zout café is opslag, dan? Nou ja, ze staan al met 10... in Interview Transcripts .docx

● HR Het is een hogedruk bom in Zuidwending. Want in de caverne naast de caverne waar op dit moment een test met waterstof opslag geplaatst voeren ze experimenten uit voor hoge druk opslag. En daarmee moeten we even Uitgaan van wat er dan In de pers verschijnt, maar ook In de lokale blaadjes en in onze contactgroepen en dergelijke.

1 Quotations:

☺ 1:153 ¶ 677 – 680, Het is Een Co2 bom of een hogedruk bom, want In het veld ernaast willen ze. Sorry, Ik weet niet of j... in Interview Transcripts .docx

● HR Het is Natuurlijk wel een heel groot belang bij EZK, Economische Zaken, om de geopolitieke situatie te vertalen, maar Grofweg gesproken, 500 miljard euro die ik nog onder de grond ligt. En dan wil ik absoluut niet de beschuldiging richting Mevrouw Bruins doen dat zij anders zou reageren dan de rest van het ministerie, maar Het zijn wel andere belangen.

2 Quotations:

☺ 1:179 ¶ 740, Het is Natuurlijk wel een heel groot belang bij EZK, Economische Zaken, om de geopolitieke situatie... in Interview Transcripts .docx

☺ 1:180 ¶ 781, Er is geen helder kader waaraan participatie moet voldoen. Er zijn gemeenten die zijn voornemens, om... in Interview Transcripts .docx

○ HR Kwantificeren van veiligheid in de vorm van geld is een belangrijk aspect – dit willen oost groningers. Als dit mogelijk is, het meest belangrijk en de beste manier om mensen aanboord te krijgen

1 Quotations:

☺ 1:158 ¶ 689, Kwantificeren van veiligheid in de vorm van geld is een belangrijk aspect – dit willen oost groninger... in Interview Transcripts .docx

● HR Voorbeeld van lokale druk op een geemten is het Data Center in Zeewolde. Die krijgt dan 1 grote pot Met geld waar ze nog nooit over hebben gedroomd. Het werdbesloten vlak na de verkiezingen ipv ervoor. Uiteindelijk is een partij er scherp voor gaan staan

1 Quotations:

☺ 1:161 ¶ 693 – 695, data Center en data Center voor Facebook? Ja dan Lokaal is dat heel erg lastig. YS: En wat was daar?... in Interview Transcripts .docx

- HR Voorbeeld van Ommelander Ziekenhusi. Als ze meewerken aan de morele kant van de plaatsing van zonnepanelen in een gebied waarop een lokaal gemeentelijk verbod ligt ivm landschappelijk waarde. Dan worden de schulden van het ziekenhuis afbetaald. Dus een lokaal bestemmingsplan waar druk opkomt vanuit regionaal niveau. Iedereen in de omgeving weet, door de financiering van het zonnepark wordt financieel probleem van regionaal ziekenhuis opgelost.

1 Quotations:

☺ 1:162 ¶ 697 – 699, ommerland ziekenhuis. Die zelfs die is verhuisd, dat zijn fusie van twee ziekenhuizen van Delfzijl e... in Interview Transcripts .docx

- JL De druk die verschillende ministeries uitvoeren op een gemeente en waar je dan naar luistert. We hebben gewoon een aantal prangende opgaven. Hetzelfde met de krachten tussen IW en EZK is bijvoorbeeld het dossier rondom mijnbouw achtige activiteiten. Dat is een Verschillend krachtenspel en Dat is ook de departementen verschillen onderling in kracht. Dus een EZK is veel sterker dan een IW

1 Quotations:

☺ 1:259 ¶ 1096 – 1098, druk die verschillende ministeries uitvoeren op een gemeente waar je naar luistert. Dat dat eigenlij... in Interview Transcripts .docx

- JL het kennisniveau wat je vraagt om zo'n besluit te nemen en ook alles in perspectieven af te wegen is heel erg hoog. Vraagt om heel specialistische kennis. Nou, die hebben we niet op regionale schaal of die bij provincie ook niet bij gemeentes. Dus dat dat bij het rijk ligt, vinden we absoluut een goede keus

1 Quotations:

☺ 1:242 ¶ 1041, het kennisniveau wat je vraagt om zo'n besluit te nemen en ook alles in perspectieven af te wegen is... in Interview Transcripts .docx

- JL Iemand zal een pijnlijke keuze moet maken en die komt steeds hoger In het schaalniveau te zitten. Als die niet lukt in bijvoorbeeld een gemeente op schaalniveau van de gemeente. Daar kijkt men toch wel snel naar een provincie om die mogelijke keuzes te maken. En op het moment dat het op provinciaal niveau niet lukt, dan zegt men gewoon, Het is van nationaal belang. Dus bijvoorbeeld, ze zijn nu bezig aan de waterstof backbone in wezen, dus structuur. Ja, wij verwachten dat het gewoon netjes door EZK wordt, wordt uitgerold en dat we daar niet heel veel op voorhand keuze in hebben.

1 Quotations:

☺ 1:237 ¶ 1032, emand een pijnlijke keuze moet maken en dat die pijnlijke keuze op een gegeven moment steeds hoger I... in Interview Transcripts .docx

- JL Ik zou niet de keuze willen hebben over waar die komt te liggen of dat hij in Overijssel komt te liggen. Wat ik wel zou willen, is dat je over het proces daarnaartoe of over de inpassing ervan. Daar zou je wel over kunnen nadenken.

1 Quotations:

☺ 1:238 ¶ 1034, ik zou Niet de keuze willen hebben over, zeg maar over waar die komt te liggen of dat hij in Overijs... in Interview Transcripts .docx

- JL Je moet realiseren dat de verwevenheid tussen partijen die iets niet willen actiegroepen heel goed de weg weten te vinden naar de politieke partijen. In de politieke arena is er altijd wel iemand die zich daarvoor leent om daar zijn punt van te maken en als hij daarin vasthoudend is. Nou ja, dan heeft hij. Daar scoort hij daar elke keer mee. En het zijn ook Mensen die Natuurlijk publiciteit heel goed weten te behalen. Dus je ziet een trits van media-aandacht. Dat is dus een veel grotere impact denk ik dan een 10, 15 jaar geleden door de snelle media.

1 Quotations:

☺ 1:249 ¶ 1070, Je moet maar ook weer off the record realiseren dat de verwevenheid tussen partijen die iets niet wi... in Interview Transcripts .docx

- JL Maar het gesprek met regionale bestuurders erover aan, hoe zou je dit willen. Dat kan dan overtuiging zijn dat een bestuurder wel zegt, nou, liever dan maar waterstof in plaats van radioactief afval. En pas dan komt een moment dat je je beleid als regio, als gemeente iets kan verankeren. Provincie hetzelfde. Uiteindelijk moet iets In een gebied landen

1 Quotations:

☺ 1:258 ¶ 1088 – 1089, Maar het gesprek met bestuurders erover aan. Hoe zou je dit willen en realiseer je dat er dan Ook an... in Interview Transcripts .docx

- JL Ook als EZK zijnde: Die hebben het liefst dat decentrale overheden dit soort aspecten bijvoorbeeld in jullie omgevingsplan omgevingsverordening of In de visie vast gaan leggen. Dan kunnen we daarnaar verwijzen in onze vergunningverlening. Nou, en nu is het nog toch nog Voor mijn gevoel nog iets te veel de zetel in Den Haag beslist. En, ik zou het wel mooi vinden als ze op onderdelen wat tegemoet komen en ook vragen aan ons gaan stellen van. Nou, we vinden dat jullie dit moeten verankeren in jullie beleidsdocumenten.

1 Quotations:

☺ 1:256 ¶ 1085, En, dat vind ik ergens met de komst van de Omgevingswet zelf wel erg Zonder Ik denk dat dat daar raa... in Interview Transcripts .docx

- JL SODM die is toezichthouder op op de vergunningen dat die zich eigenlijk ook wel opwerpt als een soort hoeder van de Leefomgeving en en ook wel serieus ingaat op alle kritische vragen. EZK veel meer ziet Als de nou beleids eenheid. En De vergunning verlenen, maar deel Omgevingsmanagement daar neerlegt. Enerzijds of anderzijds, hè. Ze hebben ook nog een uitvoeringsorganisatie. Dat heet EBN. Dat je ook nog zegt Van ja, die mogelijkheid bieden we ook hè? Dat helemaal onttrekken aan de discussie wat je nu wel eens ziet nou, Dat lijkt me niet wenselijk.

1 Quotations:

☺ 1:246 ¶ 1056, SODM die is toezichthouder op op de vergunningen dat die zich eigenlijk ook wel opwerpt als een soor... in Interview Transcripts .docx

- JL SODM ook veel beter, wordt geaccepteerd Omdat het een kritische toezichthouder is dan de vergunninghouder die ook de beleidsdoelstelling moet realiseren.

1 Quotations:

☺ 1:247 ¶ 1060, SODM ook veel beter, wordt geaccepteerd Omdat het een kritische toezichthouder is dan de vergunningh... in Interview Transcripts .docx

- JL Voor alle mijnbouwactiviteiten los van dit incident, zegt de EZK wel dat primair de communicatie ligt bij de verantwoordelijke mijnbouw ondernemer en daarmee eigenlijk ons vaak niet tijdig tenminste niet voorafgaand aan een vergunningsprocedure informeert. Communicatie met lokale overheden is niet hun eis die is vastgelegd voor participatie een mijnbouwwet.

1 Quotations:

☺ 1:236 ¶ 1029, oor alle mijnbouwactiviteiten los van dit incident, zegt de EZK wel dat primair de communicatie ligt... in Interview Transcripts .docx

- JL Wat helpt, is in hoeverre een gemeente, maar ook een provincie toch een eigen beeld heeft. Op het moment dat wij scherper kunnen formuleren wat we belangrijk vinden. Hoe we dat vinden? En die speelruimte Als het ware dan ook In de wet geborgd is en wij zitten heel erg op participatie communicatie inderdaad, uitleg daarvan vooral voor een breed publiek. Nou, Dat is nog steeds niet In de mijnbouwwet goed geborgd

1 Quotations:

☺ 1:255 ¶ 1084, wat ik me wel kan voorstellen, wat helpt, kijken het en het helpt wel in hoeverre een gemeente, maar... in Interview Transcripts .docx

- JL Wat het verschil is, is dat je wel degelijk wat ruimte laat om nog decentraal na te denken over een invulling. En wat voor ons steeds belangrijker wordt als gemeente en provincie, is dat zo'n activiteit meerdere doelen dient, dus naast zoutwinning ook denken aan energietransitie. Het gaat om ook een regionale kosten en baten verdeling. Dat je veel meer vraagt aan initiatiefnemers om hun maatschappelijke rol te vervullen. Nou en daar is op dit ogenblik nog weinig ruimte voor in mijnbouwwet versus Omgevingswet denken.

1 Quotations:

☺ 1:243 ¶ 1042, Wat het verschil is van hoe het nu of met name hoe het 5 tot 10 jaar verleden geregeld was én straks... in Interview Transcripts .docx

- JM Bij de waterstof backbone hoort EZK gewoon een stevige rol te hebben Waarom gaat het soms zo moeizaam, omdat Den Haag geen regie voeren en geen heldere uitspraken wenst te doen. Daar zal het ministerie gewoon duidelijke beleidskeuzes moeten maken vanuit die beleidskeuze prima dat dan een mijnbouwbedrijf aan de slag gaat met de processen, maar er zit iets achter.

1 Quotations:

☺ 1:245 ¶ 1052 – 1053, Het gaat om die waterstof backbone, dan hoort EZK gewoon een stevige rol te hebben. Nee, Dat is niet... in Interview Transcripts .docx

- JM De nabijheid van zo'n initiatiefnemer is ook een relevante factor. Dat was ook een van de problemen met AkzoNobel In het verleden. Die daar letterlijk opgeschoven vanuit hengelo via Amersfoort in Amsterdam, die die raakte verder weg uit de omgeving en dat creerde een afstand met de omgeving.

1 Quotations:

☺ 1:253 ¶ 1079, nabijheid van zo'n initiatiefnemer of zo of zo of zo. Een mijnbouwbedrijf is ook een relevante facto... in Interview Transcripts .docx

- JM En destijds hebben bestuurders dat gesprek ook niet scherp genoeg gevoerd. Het was toen echt informeel In het voortraject Nog voordat EZK heel erg bij betrokken was. Wat levert het ons op als regio, als gemeente? Daar is wel het gesprek over begonnen, Maar het gesprek is nooit afgemaakt, de wettelijke kaders waren toen anders. Waar je In de toekomst wel dat dat soort gesprekken wel explicieter met elkaar worden gevoerd, en moet worden opgenomen in het traject

1 Quotations:

☺ 1:244 ¶ 1047, En destijds hebben bestuurlijk dat gesprek ook niet scherp Genoeg gevoerd. Want Het is echt... in Interview Transcripts .docx

- JM formeel is de gemeente of de regio nooit de vraag gesteld. En voorlopig wordt hij ook niet gesteld van hoe kijken jullie tegen wateropslag in dit gebied aan? Terwijl we wel de kaartjes te zien Natuurlijk in stukken die naar de Tweede Kamer gaan. En dan informeel weten aantal bestuurders te Natuurlijk wel van, maar gegeven moet je eventjes toch met de regio gaan schakelen als departement in Den Haag. Van goh. We hebben plannen, We moeten We moeten een Aantal dingen doen met elkaar. Hoe kijken jullie tegen aan als regionaal bestuur. Er zijn maar twee gebieden Nederland met zout cavernes. En, Dat is vrij simpel, dus daar moet je als departement je gesprek voeren.

1 Quotations:

☺ 1:257 ¶ 1086 – 1087, formeel is bijvoorbeeld de gemeente of de regio nooit de vraag gesteld. En voorlopig wordt hij ook n... in Interview Transcripts .docx

- JM Het probleem zat ook in de beeldvorming. Brouwerij van Grolsch staat net aan de andere kant van de snelweg tegenover die die cavernes waar die gasolie inzit. Wat deed dat bier bedrijf als eerste de gemeente aansprakelijk stellen. Dus zo word je nee, maar zo wordt je toch wel ergens ingetrokken terwijl je eigenlijk in geen formele Rol in hebt.

1 Quotations:

☺ 1:276 ¶ 1074, Dat was het probleem niet zozeer In de technische zin, maar meer In de beeldvorming Ja, met het lull... in Interview Transcripts .docx

- JM Ja, die vliegias discussie, hoe vul je die zoutcavernes op, doe je dat met gevaarlijk afval, of niet? Dat heeft ook dat dossier rondom die gasolieopslag heel erg ingekleurd. Ook een zogenaamd onafhankelijke wetenschapper die achteraf blijkt te werken voor de stichting Stop afval waarde sorry, de stichting tegen wat mijnbouwactiviteiten hierin hier in Nederland. Maar dan zie je gewoon dat de politiek zijn eigen invulling geeft en zijn rol pakt door wat externe deskundigheid in te huren en kennis in te kopen.

1 Quotations:

☺ 1:248 ¶ 1065 – 1067, a, die vliegias discussie, hoe vul je die zoutcavernes op, doe je dat met gevaarlijk afval, of niet?... in Interview Transcripts .docx

- JM Op het moment dat je alles helemaal decentraal doet kom je gewoon Niet uit, zeker op gemeentelijk niveau. Die partijen handelen heel erg eigenbelang, heel erg klein schaalniveau, dit soort nationale structuur, nationale belangen, dat krijg je

Gewoon heel moeilijk afgewogen daar. Als je gewoon opgave hebt die van nationaal belang zijn, moet je dat gewoon van bovenaf organiseren, maar wel met ruimte voor de regio om die mee te laten profiteren.

1 Quotations:

1:239 ¶ 1035, Op het moment dat je alles helemaal decentraal doet dat gaat heel veel discussies over Daar kom je g... in Interview Transcripts .docx

○ JM voor dit soort projecten hebben decentrale overheden eigenlijk geen ruimte. Dat is gewoon een Rijksinpassingsplan aangelegen vanuit EZKs bestemmingsplan met een rijkscoördinatie regeling en dat heb je maar in te passen, heel zwart wit. Dat is niet per se slecht, lokaal organiseren kan lastig zijn met dit soort projecten. Overigens is die verhouding wel wat beter geworden. EZK ziet in dat je een regio niet zomaar kan overvallen.

1 Quotations:

1:234 ¶ 1025, voor onze projecten hebben decentrale overheden eigenlijk geen ruimte. Dat dat, Dat is gewoon een Ri... in Interview Transcripts .docx

● JM We werden door Akzo Nobel eigenlijk al aan de voorkant meegenomen. Het plan was in die fase om de regio juist in de regio te houden en Het de gemeente en provincie Samen te doen. En zijn daarin teruggefloten door EZK. Ja, dat willen wij niet. Wij willen dit gewoon Als een nationaal belang bestempelen. Dit is maar op één manier te doen zijn In het jaar rijkscoördinatieregeling Inpassingsplan.

1 Quotations:

1:235 ¶ 1028, Eigenlijk al aan de voorkant door ik dat het door door Akzo Nobel toen het. Alsnog heten die hebben... in Interview Transcripts .docx

● JM We zijn dat de laatste jaren per jaar regionale samenwerking politieke lobbyen aan het ombuigen naar een wat meer positief dossier. En, dat doen we onder andere netwerk verband. En in dat netwerk onder Twente, waarbij de gemeenten Samen met het bedrijfsleven meer zeggenschap door lokale overheden regionale overheden in de ondergrond. Zo lopen er ook initiatieven rondom energie opslag om die in regionale context in te passen.

1 Quotations:

1:233 ¶ 1019 – 1020, We zijn dat de laatste jaren per jaar regionale samenwerking politieke lobbyen aan het ombuigen naar... in Interview Transcripts .docx

● JR De gemeente voelt zich daar een beetje door overvallen in die zin. Het spul wordt daar in die cavernes gepompt. We gaan er niet over We hebben niks over te zeggen, maar wij krijgen wel de kennissen van de omgeving over ons heen. In de uiteindelijke uitwerking is het allemaal best goed gegaan. Maar in die relationele dingen zeg maar, hoe hou je elkaar op? Hoe Sluit elkaar aan hoe communiceer je over het weer en naar de omgeving. Maar daar valt ook nog Wel wat over te zeggen.

1 Quotations:

1:231 ¶ 1018, emeente Enschede en home rollen en bevoegdheden en taken die. Je over en weer hebt? En er was indert... in Interview Transcripts .docx

● JR en JM: Absoluut, je hebt niks te verbergen, toch? Als je boekt, dus laat gewoon zien. En leg het op tafel en laat mensen er ook wat van vinde. Transparantie schept vertrouwen

1 Quotations:

1:252 ¶ 1077 – 1078, us, eigenlijk is het in dat opzicht is de transparantie van wat het proces inhoudt. Hoe het loopt, i... in Interview Transcripts .docx

○ JR Jje hoeft niet ingewikkeld te maken. Je moet het gesprek gaan voeren met de omgeving en goed uit kunnen leggen wat daar gewoon gaat gebeuren, wat de consequenties, wat de risico's zijn en soms ook hele platte inhoudelijke discussies. Je moet uit kunnen leggen wat je doet in gebieden wat dat betekent voor Voor bedrijven én inwoners.

1 Quotations:

1:254 ¶ 1083, je hoeft niet ingewikkeld te maken. Er is gewoon 1 initiatief en dat wordt vanuit de landelijke bele... in Interview Transcripts .docx

○ JR Wat volgens mij wel geholpen heeft Akzo in dit geval nog wel heel goed heeft kunnen uitleggen wat of daar risico's aan zitten en als milieu, hygiënische kanten van. En, Dat was opzich wel een goed verhaal en uiteindelijk In de In de uiteindelijke uitvoering heeft dat ook wel geklopt. Er is daar ook telkens wel over communiceren dus. In die uitvoeringsfase is die communicatie volgens mij na directe omwonenden Enzovoort, redelijk goed. Dat heeft geholpen om de weerstand ook te verminderen

1 Quotations:

1:251 ¶ 1076, Ja, maar wat volgens mij wel geholpen heeft Akzo in dit geval nog wel heel goed heeft kunnen uitlegg... in Interview Transcripts .docx

● JR: Die uiteindelijke beslissing laat je bij het rijk liggen. Maar de wereld veranderd, lokale overheden voelen zich gebonden aan hun regio. Mensen In het gebied kom je niet meer omheen. Hun paseren, dat gaat niet meer werken

1 Quotations:

1:240 ¶ 1036, Vaak dat je die dat je die die die uiteindelijke beslissing sta je, op het rijk laat Bij het rijk La... in Interview Transcripts .docx

○ JW Als je participatie dus goed wilt rgelen moet je: je bent bevoegd gezag en zegt er komt een azc. De vraag is niet of die er komt maar bij wijze van spreken hoe kunnen we de overlast beperken, dat is dan de participatievraag, zo moet je hem insteken.

1 Quotations:

1:181 ¶ 785, Als je participatie dus goed wilt rgelen moet je A) een soort spelregelkader meegeven en, wij doen v... in Interview Transcripts .docx

○ JW als we dan zeggen ergens een plek passend vinden als je dan een soort maatschappelijke tender gaat uitschrijven voor partijen die dat willen doen. Waarbij je dus niet alleen maar naar de financiële kant kijkt, maar ook allerlei andere randvoorwaarden kunt meegeven die onderdeel zijn van die maatschappelijke tender. Dat zit nu niet in de omgevingswet.

1 Quotations:

1:184 ¶ 793, als we dan zeggen ergens een zijstraat in een gebied in Groningen zouden wij geschikt achten, dan zo... in Interview Transcripts .docx

- JW Bij ondergrondse energieopslag projecten moet een soort van kader zijn, maar niet Iedereen is gelijk (de ene heeft hoger inkomen etc). Dus je moet niet iets willen implementeren waarbij iedereen op dezelfde manier behandeld wordt én In het ene project in de ene buurt zal er een andere uitkomst komen dan bij andere projecten in andere buurten. Bijvoorbeeld Mensen met een kleine beurs dat die een premie van x krijgen en de rest wordt over iedereen verdeeld. Maar goed dat is maatwerk en dat moet de omgeving zelf maar beslissen. Maar je kan ze wel meegeven dat je er op zo een manier naar kunt kijken.

1 Quotations:

- ☺ 1:202 ¶ 878, bij ondergrondse energieopslag projecten. Ja, er moet een soort van kader zijn, maar niet Iedereen i... in Interview Transcripts .docx

- JW Dat is dus ook waar het in de windmolens mede fout is gegaan. De optie er komen geen windmolens is nooit op tafel geweest. En de optie hoe kunnen we daar nou de omgeving van mee laten profiteren is helemaal aan het einde van de rit nog een keer in het spel gekomen. Maar toen was de verhouding al zo verzuurt

1 Quotations:

- ☺ 1:195 ¶ 819, Dat is dus ook waar het in de windmolens mede fout is gegaan. De optie er komen geen windmolens is n... in Interview Transcripts .docx

- JW Dat is wel een complicerende factor, EZK in de regio groningen staat er heel slecht voor. EZK zit heel erg op doordrukken en redeneert niet vanuit de mens. Dus als dan nu weer EZK het bevoegd gezag wordt voor ondergrondse energieopslagen dan moet je je serieus gaan afvragen zijn ze er toe in staat? EZK eigenlijk nooit met burgers te doen heeft. Die doen dingen voor bedrijven.

1 Quotations:

- ☺ 1:197 ¶ 827, Men zit heel erg op doordrukken en redeneert niet vanuit de mens. Dus als dan nu weer het ministerie... in Interview Transcripts .docx

- JW De initiatiefnemer gaat dan naar de gemeente en die had niet fatsoenlijk beleid, dus die moet er wel medewerking aan verlenen. Op een manier dat iedereen denkt kan dit zomaar? Dus je hebt de vraag wat doen we waar, is een ruimtelijke ordeningsvraag en die ligt niet primair bij de initiatiefnemer als je het aan mij vraagt. Ik vind dat de ruimtelijke ordening daarin veel sturender moet zijn, wat dan waar mag.

1 Quotations:

- ☺ 1:183 ¶ 789, e initiatiefnemer gaat dan naar de gemeente en die had niet fatsoenlijk beleid, dus die moet er wel... in Interview Transcripts .docx

- JW De NOVI is ook maar een visie zonder een dwingend kader. Je kan in een visie ook verder gaan en er bepaalde voorwaarden aan koppelen. En zeggen alleen die en die locaties zijn geschikt en punt. We hebben in NL bijvoorbeeld wel een aantal ruimtelijke reserveringen gemaakt voor kerncentrales, los wat ik daarvan vind. Dat scheidt wel een kader. Dat mis ik in de omgevingswet, er moet meer sturing zijn.

1 Quotations:

- ☺ 1:185 ¶ 797, Je kan in een visie ook verder gaan en er bepaalde voorwaarden aan koppelen. En zeggen alleen die en... in Interview Transcripts .docx

- JW De omgevingswet is nog niet in werking getreden maar er zitten wel grote zorgen vanaf onze kant of het zo gaat werken als het bedoeld is.

1 Quotations:

- ☺ 1:182 ¶ 785, De omgevingswet is nog niet in werking getreden maar er zitten wel grote zorgen vanaf onze kant of h... in Interview Transcripts .docx

- JW Er is geen helder kader waaraan participatie moet voldoen. Als je geen spelregel kader meegeeft raken er ergens partijen teleurgesteld. Omdat iedereen dan met zijn eigen verwachtingspatroon dit speelveld betreedt en dat kan nooit zomaar 1 op 1 op elkaar liggen.

1 Quotations:

- ☺ 1:180 ¶ 781, Er is geen helder kader waaraan participatie moet voldoen. Er zijn gemeenten die zijn voornemens, om... in Interview Transcripts .docx

- JW In schonoebeek rondgelopen en het olieveld in schonoebeek is een tijd gelsoten geweest omdat het niet meer economisch rendabel was. Toen hebben ze in 2005 besloten om het weer te openen omdat ze met nieuwe technieken het weer rendabel kregen, en toen ging bijna letterlijk de vlag uit in schonoebeek. De nam komt weer terug.

1 Quotations:

- ☺ 1:189 ¶ 801, n schonoebeek rondgelopen en het olieveld in schonoebeek is een tijd gelsoten geweest omdat het niet... in Interview Transcripts .docx

- JW Je hoort dat je stapeling van activiteiten krijgt waardoor mensen steeds kritischer worden. Dat cumulatieve effect zien we steeds vaker, het wordt altijd op zich beschouwd maar het cumulatieve aspect wordt nooit meegenomen.

1 Quotations:

- ☺ 1:186 ¶ 799 – 801, nu een stapeling van activiteiten krijgt waardoor mensen steeds kritischer worden. Hebben het gevoel... in Interview Transcripts .docx

- JW Je moet ook kijken naar de impact, kijk als jij een kippenschuur gaat bouwen dat heeft een heel lokaal effect, hebben mensen in de stad groningen geen last van. Juist bij dit soort integrale gebiedsontwikkeling moet je naar cumulatieve effecten kijken. Dit is wat ik mis in de omgevingswet

1 Quotations:

- ☺ 1:192 ¶ 803, Je moet ook kijken naar de impact, kijk als jij een kippenschuur gaat bouwen dat heeft een heel loka... in Interview Transcripts .docx

- JW Mensen redeneren niet vanuit grondposities of afdelingen bij de gemeente of privaat/publiek. Die kijken gewoon dit is mijn leefomgeving en als het verslechterd kan ik dan iets anders beter maken. En dat cumulatieve effect, die mensen in de omgeving zien dat wel heel degelijk. Die kijken naar hun omgeving en zeggen ja ik zie daar dit en hier dat en daar het andere en dat wordt ook nog ontwikkeld, veroorzaakt overlast en dat stinkt. De vraag is is dit dan nog wel leefbaar en als het antwoord nee is, wat is dan mijn

alternatief als dit allemaal door moet gaan. Ik mis dus die samenhang, zowel vanuit dat cumulatieve effect milieutechnisch gezien maar ook vanuit het perspectief van de mensen van de omgeving.

1 Quotations:

1:191 ¶ 803, dat is ook een kwetsbaar onderdeel: mensen redeneren niet vanuit grondposities of afdelingen bij de... in Interview Transcripts .docx

● JW Neem ondergrondse energieopslag, op het vlak van de ruimtelijke ordening komen zoveel maatschappelijke opgaven op ons af dat de druk op de ruimtelijke ordening zo groot wordt. Dat als wij dit soort kunstjes uithalen dan gaat straks niks meer kunnen omdat dan iedereen overal in de weerstand schiet.

1 Quotations:

1:196 ¶ 823, Nou dat soort gekkigheden kunnen we ons niet permitteren, en waarom niet. Neem ondergrondse energie... in Interview Transcripts .docx

● JW Puur het idee dat er een soort balans is tussen de baten en lasten en baten dat is waar uiteindelijk die participatie met de omgeving toe zou moeten leiden. U bent initiatiefnemer, u komt wat uit deze omgeving halen, wat komt u deze omgeving brengen? Dat zou ik een interessante propositie vinden

1 Quotations:

1:188 ¶ 801, Puur het idee dat er een soort balans is tussen de baten en lasten en dat is er nooit geweest. Dat i... in Interview Transcripts .docx

○ JW Terwijl we weten dat dat juist het knelpunt is, niet de activiteit maar het draagvlak voor dat proces. Je moet eerlijk zijn en zeggen luister; er is besloten dat, daar gaat deze participatie niet over. De scope van de participatie is overlast verminderen of inpassing of wat dan ook. Maar het gaat er komen. Dat schept ook een kader. Ik zie het eigenlijk in de praktijk heel vaak gebeuren, dan heeft men binnenskamers al bedacht dat is de beste oplossing. Omwonende denken dat onderdeel van participatie, het hoeft er niet te komen. Maar als dat geen optie is moet je er eerlijk over zijn.

1 Quotations:

1:199 ¶ 831, erwijl we weten dat dat juist het knelpunt is, niet de activiteit maar het draagvlak voor dat proces... in Interview Transcripts .docx

○ JW Want als de helft van de inkomsten van dat zonnepark deels naar de omgeving vloeien dan denk je wel, vind het niet mooi maar we hebben het er wel wat aan. Dat is een van de dingen in dat aardgasdossier wat in Groningen fout is gegaan. Groningen betaalt wel de lasten maar heeft nooit wat van de lusten gehad.

1 Quotations:

1:187 ¶ 801, Want als de helft van de inkomsten van dat zonne park deels naar de omgeving vloeien dan denk je wel... in Interview Transcripts .docx

● JW Wij hanteren een kader van 50% lokaal eigenaarschap bij grootschalige energieprojecten. Daarmee schep je een kader. Dat betekent ook dat als jij het een goed idee vindt je nog steeds op die 50% uitkomt maar dat als je het een slecht idee vindt, en het moet er uiteindelijk alsnog komen, dan heb je niet al je kaarten verspeelt en mag je nog steeds van die 50% uitgaan. En dat is de kracht van gebruik maken van een kader en je daaraan houdt, daarmee voorkom je die scheve verhoudingen en houd je toch de optie voor maatwerk per regio/project open.

1 Quotations:

1:193 ¶ 807, aan die 50% lokaal eigenaarschap bij grootschalige energieprojecten. Daarmee schep je een kader. Dat... in Interview Transcripts .docx

● JW Zo is de participatie nu niet ingestoken, mijn beeld bij de huidige omgevingswet is dat participatie zo is ingestoken van 'beste initiatiefnemer ga zelf maar uitleggen dat het een goed idee is'. Dan laat je die initiatiefnemer bungelen. Dat zijn niet mensen die thuis zijn in dit soort processen. En anderzijds de omgeving denkt van ja jij gaat ons nu vertellen dat we dit moeten doen. Dus je krijgt automatisch dat de partijen tegenover elkaar komen te staan.

1 Quotations:

1:190 ¶ 801, Zo is de participatie nu niet ingestoken, mijn beeld bij de huidige omgevingswet is dat participatie... in Interview Transcripts .docx

● MB Als je de De participatieladder hebt met die met de niveaus en waar meebeslissen één van de hoogste niveaus zijn. Ja, dat dat kan dat op bepaalde onderdelen kan dat Natuurlijk weer wel en andere weer niet. Dan zal je dus met die omgeving moeten kijken waar dat wel ligt en daar ook heel eerlijk over zijn. Want ja, sommige dingen Ja daar kan Ik je Alleen maar Over informeren, want Dat is gewoon een gegeven feit. Je moet strategisch kijken waar je ruimte kan geven en waar niet

1 Quotations:

1:74 ¶ 289, Is je de De participatieladder hebt met die met de niveaus en waar meebeslissen één van de hoogste n... in Interview Transcripts .docx

○ MB Binnen Gasunie zou Ik heel graag willen dat we vroegtijdig gewoon een afweging wordt gemaakt, hè? En daar Moet je wel voor open staan als infrastructuur bedrijf.

1 Quotations:

1:70 ¶ 278, Binnen Gasunie zou Ik heel graag willen dat we vroegtijdig gewoon een. Hoe heet het nou? Een afwegin... in Interview Transcripts .docx

○ MB Dat is Natuurlijk de kwetsbaarheid Bij wat ze hebben bedacht. Omdat datt dat een ICT project is van De overheid. Daar maken gemeentes, maar ook een pro- rail, ook een TENNET en ook een Rijkswaterstaat en ook Gasunie maken zich daar wel serieus zorgen over.

1 Quotations:

1:67 ¶ 272, Dat is Natuurlijk de kwetsbaarheid Bij wat ze hebben bedacht. Omdat datt dat een ICT project is van... in Interview Transcripts .docx

○ MB Dat zijn Natuurlijk aparte ministeries die allemaal een eigen agenda hebben. Ik kan alleen maar merken dat als jij een bepaalde projecten Aan het doen. Bent dat dat wel eens lastig is, want dat kan Best wel eens haaks op elkaar staan en leiden tot verwarring

1 Quotations:

☺ 1:72 ¶ 283, Dat zijn Natuurlijk aparte ministeries die allemaal een eigen agenda hebben. En ik merk ook wel dat... in Interview Transcripts .docx

- MB Het dat participatie In de Omgevingswet staat maakt wel dat het voor mij ook weer makkelijker is Omdat In de In de organisatie Aan te geven dat dan gewoon Komt.

1 Quotations:

☺ 1:68 ¶ 272, Maar het feit dat participatie In de Omgevingswet staat maakt wel dat het voor mij ook weer makkelij... in Interview Transcripts .docx

- MB Ik denk dat bij bevoegde gezagen een checklist komt hoe moet je participatie om moet gaan. Nou, daar willen we bij weg te blijven, door zelf een Gasunie participatie Protocol te maken. Dit laat zien aan bevoegd gezagen. Dit is de reden Waarom er een participatie komt en zo hebben we er over nagedacht zodat we dat niet 6 a 7 keer moeten aanpassen. Op die manier willen we dat jij willen we daar een beetje op voorsorteren en Ik weet dat dat zowel een Tennet als een Pro-rail daar ook mee bezig zijn.

1 Quotations:

☺ 1:71 ¶ 281, Dan komen er bij, bevoegde gezagen Een checklist hoe moet je participatie om moet gaan. Nou, daar wi... in Interview Transcripts .docx

- MB Ik Pak hem even terug naar de Omgevingswet daar, ben ik dan toevallig ook mee bezig met de met een Participatie leidraad, want inderdaad, participatie wordt Natuurlijk een semi verplichting.

1 Quotations:

☺ 1:63 ¶ 262, Ik Pak hem even terug naar de Omgevingswet daar, ben ik dan toevallig ook mee bezig met de met een P... in Interview Transcripts .docx

- MB Of EZK wat actiever Moeten participeren. Ja ik denk ja. De projecten van die omvang lukt het hier meer als je onder een steen gaat zitten en gesplinterd dan proberen een initiatief te ontwikkelen Het is goed dat het nu wettelijk verankerd is, dat geeft meer meer kracht.

1 Quotations:

☺ 1:69 ¶ 273, zou EZK wat actiever Moeten participeren. Ja ik denk ja. Weet je Als je de projecten die van die omv... in Interview Transcripts .docx

- MB op een gegeven moment een bepaalde signatuur hebt van je strategische omgevingsmanager, dat Mensen wel herkennen als. Van hé Gasunie doet dat altijd goed. En dat vind ik weer zo belangrijk,

1 Quotations:

☺ 1:62 ¶ 260, op een gegeven moment een bepaalde signatuur hebt van je strategische omgevingsmanager, dat Mensen w... in Interview Transcripts .docx

- MB Ten eerste, moet Strategisch omgevingsmanagement goed doet in een project. Ditleidt altijd door tot een infrastructuur die in bedrijf wordt genomen voor langere tijd. Dus dus mijn tweede pilaar waar ik aan het bouwen ben? Dat is strategisch omgevingsmanagement In de beheerfase net zo belangrijk wel andere insteek, maar net zo belangrijk.

1 Quotations:

☺ 1:61 ¶ 260, is strategisch omgevingsmanagement goed doet in een project oké. Ik denk ja, Maar het project leidt... in Interview Transcripts .docx

- MB We hebben voorlopen, doorlopen, nalopen. Dat zijn dat zijn bekende kreten. Binnen de organisatie wat We hebben gedaan is. Zo hebben we de participatieladder van informeren, raadplegen, adviseren, coproduceren en meebeslissen. Afhankelijk van onderwerp en situatie wordt dit afgewerkt. Dit is de linking pin van het strategisch omgevingsmanagement van Gasunie en is voor 85% uit de organisatie opgehaald.

1 Quotations:

☺ 1:76 ¶ 303 – 304, We hebben voorlopen, doorlopen, nalopen. Dat zijn dat zijn bekende kreten. Binnen de organisatie wat... in Interview Transcripts .docx

- MB We zijn bezig met mensen van buiten binnen Halen om ons dat even omgevingsmanagement Te doen, want daarin zijn we nu aan het groeien en We hebben die Mensen gewoon nog niet

1 Quotations:

☺ 1:66 ¶ 267, Mensen van buiten binnen Halen om ons dat even omgevingsmanagement Te doen, want daarin zijn we nu a... in Interview Transcripts .docx

- MB: Ten eerste, Initiatief wat Wij hebben Kan koppelen aan belangen die uit de omgeving zijn, hè? Want dan kijk Als het voor een belang In de omgeving belangrijk is dat wij initiatief doorgaat. Dan krijg je automatisch dat je elkaar wil helpen. Een mooie tweede is dat Mensen weten wat je gaat doen, hè? En denken van? Nou ja, ja, voor mij had het niet hoeven, maar weet je, Als ik er last van Heb wordt gecompenseerd. De derde categorie, Dat is de omgeving die er gewoon tegen IS, hè? De 4e is ouderwets de botte bijl gebruiken. Ik heb mijn vergunning en ik zie wel wat er komt.

1 Quotations:

☺ 1:60 ¶ 254, Initiatief wat Wij hebben Kan koppelen aan belangen die uit de omgeving zijn, hè? Want dan kijk Als... in Interview Transcripts .docx

- MD Als het rijk dus niet met één mond spreekt dan wordt het heel erg moeilijk voor lagere overheden om te snappen waar je aan kunt werken.

1 Quotations:

☺ 1:26 ¶ 74, En als daar als het rijk dus niet met één mond spreekt dan wordt het heel erg moeilijk voor lagere o... in Interview Transcripts .docx

- MD Door onevenwichtige inschatting van van het waarde pakket wat aan de orde is in het begin Gooi je gewoon een hele sector op slot. (voorbeeld is schaliegas in brabant). Hier moet men mee oppassen Bij LSES en UHS-s

1 Quotations:

☺ 1:32 ¶ 96, onevenwichtige inschatting van van het waarde pakket wat aan de orde is en door gewoon zelf die fout... in Interview Transcripts .docx



○ MD een aantal partijen hebben geen enkel idee van dat het lokale en het provinciale krachtenvelden in elkaar en daar ook helemaal geen studie naar gedaan hebben. Ze zien allerlei maatschappelijke krachten over het hoofd,

1 Quotations:

☺ 1:31 ¶ 95, en aantal partijen waarvan wij denken dat die belangrijk zijn voor de bij sommige moeten wij/ vergun... in Interview Transcripts .docx

○ MD Het handelings perspectief van de gemeente als het gaat om het gebruik van diep onder grond. Ze hebben gewoon geen formele bevoegdheid. Straks met die omgevings vergunning hebben ze dat meer

1 Quotations:

☺ 1:30 ¶ 83, handelingsperspectief van de gemeente als het gaat om het gebruik van diep onder grond. Edan zie je... in Interview Transcripts .docx

○ MD hoe ga je nou zorgen dat dat het rijk met één mond spreekt in de richting vnoordzeekanaalgebied als geheel zodat die partijen daar weten waar ze aan toe zijn. Daar zie je ook de configuraties op die verschillende niveaus die zijn incongruent. Dus als jij als je op nationale abstractieniveau die configuratie al niet in orde hebt hè tussen die drie partijen er wordt natuurlijk verrekke lastig omdat dat regionale prévention ale lokale schaalniveau wel op orde te krijgen.

1 Quotations:

☺ 1:35 ¶ 123, hoe ga je nou zorgen dat dat het rijk met één mond spreekt in de richting van de provincie noordzeek... in Interview Transcripts .docx

○ MD Ik zou de verantwoordelijkheid bij de initiatiefnemers leggen. Wat ik net al zei op het rijksniveau is het per definitie niet goed afgestemd tussen EZK en BZK en I&W. Daar kun je als initiatiefnemer EZK wel op wijzen en vragen van ga je ons helpen om die afstemming wel voor elkaar te krijgen maar je moet niet naïef zijn te denken oh dat doet deze kamer voor ons doet

1 Quotations:

☺ 1:29 ¶ 79, Nee ik zou ik zou het bij de initiatiefnemers leggen. Want EZK heeft ook een ook gewoon een wettelijk... in Interview Transcripts .docx

○ MD Je kunt wel een exploitatievergunning krijgen. Maar ruimtelijk én lokaal inpassen, dat is een ander verhaal. Dan zie je de ene waarde van EZK om Leveringszekerheid te garanderen op nationale niveua. Staat haaks op leefomgevingskwaliteit naar de omgevingswet. Daar EZK en initiatiefnemers moeten bedenken om ook het lokale niveau mee te koppelen.

1 Quotations:

☺ 1:24 ¶ 72, Wellicht via de mijnbouwwet wel een exploitatievergunning kunt krijgen maar dat je hem als je hem ru... in Interview Transcripts .docx

● MD Vertrouwen van lagere overheden en lokale gemeenschappen in de rol of de faciliterende rol van EZK gewoon niet groot is

1 Quotations:

☺ 1:27 ¶ 77, vertrouwen van lagere overheden en lokale gemeenschappen in de rol of de faciliterende rol van EZK g... in Interview Transcripts .docx

○ MD waarde veranderen ook en dat kan heel rap gaan. Energieonafhankelijkheid is in ieder geval een waarde die nu bij ons heel erg opgekomen door de geopolitieke situatie in oekraïne.

1 Quotations:

☺ 1:36 ¶ 128, waarde veranderen ook en dat kan heel rap gaan sommige mensen zeggen nou dat duurt een tijdje maar k... in Interview Transcripts .docx

○ MD: Bijvoorbeeld, kerncentrales Borselen zijn lokale juist voor. Omdat het bijdraagt aan lokale werkgelegenheid. Dus die mensen hebben geleerd daar ook bepaalde waarden die misschien wat negatiever zijn toch te accepteren omdat positieve waardepatroon groter is

1 Quotations:

☺ 1:23 ¶ 68, bijvoorbeeld, kerncentrales Borselen zijn heel veel mensen helemaal niet zo rouwig om dat ding. Waar... in Interview Transcripts .docx

○ MD: Er wordt vaak verwijt dat EZK de kant kiest van van het bedrijfsleven en te weinig kijkt naar andere waarden die in het gebied in het geding zijn.

1 Quotations:

☺ 1:28 ¶ 77, In het verwijt is vaak dat EZK de kant kiest van van het bedrijfsleven en te weinig kijkt naar ander... in Interview Transcripts .docx

● MR Die kleine gemeentes bungelen eigenlijk een beetje onderaan. De wethouders van die kleine gemeentes nemen Wel deel de bestuurders platform maar je die pakken wel grote themas bijvoorbeeld TATA in portefeuille heeft. Nou ja, je kan je wel voorstellen dat de nelangen eigenlijk van die gemeentes ook een Beetje ondergesneeuwd raken.

1 Quotations:

☺ 1:268 ¶ 1151, Dit is zeker die kleine gemeentes. Hè, die bungelen eigenlijk een beetje onderaan. De wethouders van... in Interview Transcripts .docx

○ MR Die perspectieven bepalen heel erg hoe je naar een gebied kijkt. En uiteindelijk zijn die 3 perspectieven allemaal Waar Natuurlijk. Dus het Is niet dat dat een soort strijd is tussen Perspectieven, maar die moet je bij elkaar brengen. Dus dat bedrijf Moet gewoon je business case kunnen maken.

1 Quotations:

☺ 1:274 ¶ 1172 – 1173, Dan zie je dat rijksoverheid vooral eigenlijk ook kijkt dat je toch ook echt ook een landelijk persp... in Interview Transcripts .docx

● MR Die RES is eigenlijk een uitkomst van het klimaatakkoord, dus die zijn niet opgelegd, is een soort van zelf bindende afspraak. Zijn eigenlijk soort Nieuwe ja soort vrijwillige samenwerking is het tussen overheden en hè dus provincie, gemeente, Waterschappen, want om afspraken vast te leggen. Dat op zich is, ik zeg dan weer wel qua model of is eigenlijk een prima model. denk ik. Omdat je toch ook gewoon met elkaar Probeert regionaal te kijken van Dan kunnen we afstemming komen. Maar wat daar wel bij hoort is ook zelfbinding. Dus er worden Afspraken maken maar zich er niet aan houden.

1 Quotations:

☺ 1:271 ¶ 1162, Die RES is eigenlijk een uitkomst van het klimaatakkoord, dus die zijn niet opgelegd. Dat is het kli... in Interview Transcripts .docx

- MR Die schalen, hebben allemaal verschillende belangen. Het Rijk zal in dit geval heel erg kijken vanuit de energietransitie en vanuit de ja gewoon vanuit de logistieke opgave van welke schakel is dit in de waterstof transitie. Provincie zou heel Ja maar ruimtelijke ordening en ruimtelijke kwaliteit en die zal daarvoor ook naar kijken. En een gemeente die kijkt toch ook weer gewoon naar de veiligheid van inwoners en of er wat te halen valt.

1 Quotations:

☺ 1:273 ¶ 1170, die schalen, hebben allemaal verschillende belangen. Het Rijk zal in dit geval heel erg kijken vanui... in Interview Transcripts .docx

- MR Die vergunningverlening moet ook nationaal blijven. Ik zou niet weten Waarom je dat ingewikkelder moet maken, dus dat de kennis is er ook helemaal niet, hè? Bij provincie bijvoorbeeld, laat staan bij gemeentes

1 Quotations:

☺ 1:272 ¶ 1168, die vergunningverlening is ook nationaal omdat inderdaad onder mijnbouwwet Valt, dus bevoegd gezag i... in Interview Transcripts .docx

- MR En dus door zo na te denken, kan je wel Ook meerwaarde genereren voor elk perspectief. Dat is eigenlijk wat je daarmee doet, dus denk je waar in feite die waarde kaders verbreed. Want Laten we zeggen, de oplossing voor dit soort complexe vragen ligt ook vaak In de complexiteiten, niet In de vereenvoudiging, dus dan juist door ook aandacht te geven aan die verschillende perspectieven eigenlijk.

1 Quotations:

☺ 1:275 ¶ 1175 – 1176, En dus door zo daardoor zo na te denken. Kan je wel Ook meerwaarde genereren. Dat geldt eigenlijk oo... in Interview Transcripts .docx

- MR Heel moeilijk om echte lokale gemeentelijke belangen om die ook ingebracht te krijgen in besluitvorming. en dat heeft ook mee te maken dat die besluitvorming heel gefragmenteerd is.

1 Quotations:

☺ 1:269 ¶ 1153, toch heel moeilijk om Om ook echte lokale gemeentelijke belangen om daar een meerwaarde eigenlijk. O... in Interview Transcripts .docx

- MR Ik zou de rolverdeling van de omgevingswet wel liever anders zien, Omdat het dan ook makkelijker gaat.

1 Quotations:

☺ 1:264 ¶ 1143, ik zou het wel liever anders zien, Omdat het dan ook makkelijker gaat. Dat is bijvoorbeeld zoals Wi... in Interview Transcripts .docx

- MR In het Noordzeekanaal gebied zijn 5 verschilende gemeentes en een grote industrie cluster met mondiale bedrijven zoals TATA. Daar zie je hoe al die schaalniveaus allemaal door elkaar enorm door elkaar loopt. En dat de aansturing daarvan is heel ingewikkeld is. Dus ja, Het is een heel gemixte, qua governance is het gewoon enorm ingewikkeld daar

1 Quotations:

☺ 1:267 ¶ 1149, Ja nou gewoon ziet laten we zeggen al die schaalniveaus Dat het allemaal door elkaar enorm door elka... in Interview Transcripts .docx

- MR Initiatiefnemer is privaat maar moet ook het onderzoek doen. En daar kan heel makkelijk, wantrouwen ontstaan gewoon naar De onafhankelijkheid van die Partij. Als jij dan onderzoek laat uitvoeren bijvoorbeeld In het kader van de MER dan wordt dat niet op voorhand vertrouwd. En ook omdat er in het verleden ook initiatiefnemers hebben lopen sjoemelen.

1 Quotations:

☺ 1:263 ¶ 1139, nitiatiefnemer moet ook het onderzoek doen, hè? in Nederland is het wordt gezien als een privaat ini... in Interview Transcripts .docx

- MR Mensen willen altijd wel weten van de afweging. Waarom hier? Je zou kunnen zeggen van, je wil Mensen niet onnodig zich zorgen Laten maken en dus En we informeren. Ze wel over wat er gaat gebeuren? Maar we gaan ook niet enorme Ja enorme veiligheidsonderzoek Laten zien

1 Quotations:

☺ 1:262 ¶ 1136 – 1137, Mensen willen altijd wel weten de weging. Waarom hier? Waarschijnlijk Omdat er gewoon nog met die zo... in Interview Transcripts .docx

- MR Omdat waterstof opslag nieuw is, is één van de uitgangspunten is dat je een betrouwbare kennisbasis hebt. Dus je krijgt toch Mensen die zich zorgen maken over veiligheid, veiligheidsrisico's, dus ja, Je kunt er gewoon vergif op innemen dat je Nu al moet voorbereiden op de een betrouwbare kennisbasis, Omdat je Heel veel vragen gaat krijgen.

1 Quotations:

☺ 1:261 ¶ 1132, Omdat waterstof opslag nieuw is, is dat bijvoorbeeld hè? Die die is er maar één van de uitgangspunte... in Interview Transcripts .docx

- MR Private bedrijven verantwoordelijk zijn eigenlijk voor een publieke taak. Dat gaat ook mis en. Dat dat straalt Natuurlijk wel uit Op de hele sector. Dan zal het met gasopslag wel meevallen, dat zijn op zich wel betrouwbare bedrijven worden gezien.

1 Quotations:

☺ 1:266 ¶ 1144, Want je natuurlijke Energy die ons ziet, is dat Private bedrijven verantwoordelijk zijn eigenlijk vo... in Interview Transcripts .docx

- MR wanneer wordt nou iets als Rechtvaardig ervaren? Dat het duidelijk is wat de verdeling van kosten en baten, is bijvoorbeeld wat eerlijk is. Dat Mensen hun stem kunnen Laten horen. Dat de overheid reageert op wat je hoort, dus? Dat zijn een paar van die uitgangspunten die gewoon helpen om je proces vorm te geven.

1 Quotations:

☺ 1:260 ¶ 1128, wanneer wordt nou iets als Rechtvaardig ervaren? Onder andere dus Als je proces Op die manier vormge... in Interview Transcripts .docx

○ MT als de meerderheid zegt van ja oké het is eigenlijk een goed idee ondanks dat er ik misschien het gevoel heb dat er risico zit is het toch acceptabel om dat te accepteren omdat het ook optelt bij onze waarden ook telt bij onze belangen

1 Quotations:

⊕ 1:34 ¶ 107, als de meerderheid zegt van ja oké het is eigenlijk een goed idee ondanks dat er ik misschien het ge... in Interview Transcripts .docx

○ MT Bij windmolens in Amsterdam. In de in de bijeenkomsten die daar georganiseerd werden liepen de vragen heel snel over de kaders heen van van waar de dialogen over ging en dat creëerde en heleboel extra woede en energie. Dan denken mensen vaak ik mag helemaal niks zeggen. Hierdoor ontstaat vertrouwen schending. Dus goed bedenken waarover mogen lokale partijen wel meepraten

1 Quotations:

⊕ 1:37 ¶ 135 – 137, nee dus hier is eigenlijk ook dan wel dat hele overflow en backflow in te herkennen maar zo te zegge... in Interview Transcripts .docx

○ MT Voorbeeld van trias westland. Dat is ultra diepe geothermie. Daar heel goed dicht bij de waarden die in dat gebied belangrijk worden geacht te blijven want door standbouwers energie voor de omgeving. Dan denk je nou toe maar want we moeten van het gas af want dat is niet meer te betalen. lange termijn dat zie je nu hè die tuinders die nu op die ultradiepe geothermie bron zitten. En dat heeft hij verwerkt in zijn businesscase en is zo geslaagd. wat hij ook heel slim heeft gedaan eventueel een restwarmte die gaat dan warmtenet van de gemeente dus die zijn ook tevreden

1 Quotations:

⊕ 1:33 ¶ 103, oorbeeld van trias westland. Dat is ultra diepe geothermie of diepe geothermie tot volgens mij tweeë... in Interview Transcripts .docx

○ PR Als je denk ik een goed verhaal hebt, dat ze dan wel mee gaan. Dus Je moet wel ja, de communicatie ten eerste heel goed op orde hebben En inderdaad, Mensen meenemen want anders, dan gaan ze inderdaad met hakken in het zand.

1 Quotations:

⊕ 1:164 ¶ 704, Ja, ze zijn inderdaad wantrouwend, maar Als je denk ik een goed verhaal hebt, dat ze dan wel mee gaa... in Interview Transcripts .docx

○ PR Als je nik met bewoners doet, dan zegt die bewoners, ja, wat heb ik eraan. We hebben gezien in Borger waar in feite de alle windmolens waren vergeten aan de de boer die het meeste geld erin stoppen in. Nou ja, de bewoners die voelen zich bedonderd. En als je dan het volgende plan wil neerleggen, dan krijg je niet voor elkaar.

1 Quotations:

⊕ 1:175 ¶ 727 – 728, . Dus Als je 0,0 met bewoners doet, dan zegt die bewoners, ja, wat heb ik eraan. Dus zorg dat je een... in Interview Transcripts .docx

● PR Bevoegdheid en verantwoordelijkheid moet je niet los van elkaar willen zien. Als je dat Zonder speciale regeling vooraf (zoals omgekeerde bewijslast) gaat proberen te doen voor bijvoorbeeld waterstof opslag. Dan moet je toch eerst een betrouwbaarheid factor ergens kweken op basis van die financiële veiligheid.

1 Quotations:

⊕ 1:173 ¶ 722 – 723, Bevoegdheid en verantwoordelijkheid moet je niet los van elkaar willen zien. Dat betekent ook verant... in Interview Transcripts .docx

○ PR Financiële veiligheid is denk ik een heel mooi uitgangspunt. Al die onzekerheid van Van je eigen huis. Als je dat weg neemt dan komt er veel minder onrust. Omgekeerde bewijslast zou dit moeten waarborgen

1 Quotations:

⊕ 1:165 ¶ 706, financiële veiligheid. Dat is denk ik wel een heel mooi uitgangspunt. Dus als je kijkt naar Wij hebb... in Interview Transcripts .docx

○ PR initiatiefnemende commerciële partijen hebben de kracht om het goed te doen als ze dat willen. Soms zijn het Buitenlandse partijen of noem maar op die ja de voor hun een hele andere wereld is. Dus ja, dat moet wel duidelijke kaders zijn dat het gewoon bij hoort, en Dat is de rol van de overheid die dat hun moet opleggen

1 Quotations:

⊕ 1:170 ¶ 713 – 716, initiatiefnemende commerciële partij. Maar Als ik het zo hoor, hebben zij ook wel de kracht om nou j... in Interview Transcripts .docx

○ PR Je kan niet in het dorps huis gaan vertellen wat Er gaat gebeuren als het plan nog onzeker is. Dus het belang wat gevonden moet worden is wanneer ga je dan wel en wanneer niet in gesprek. Want alles blijft er heel vaag.

1 Quotations:

⊕ 1:156 ¶ 685 – 686, un je nog niet tegelijk zeg maar In het dorps huis gaan vertellen wat Er gaat gebeuren. Omdat het pla... in Interview Transcripts .docx

● PR Mensen die een zienswijze indienen. Worden beantwoord tot in hoogste instantie op vreselijk juridische wijze. Er wordt een kader gekweekt waarbij wat aangegeven voor de gewone particulier of zelfs voor een kleine gemeente onmogelijk is. wij merken bij SES dat er mensen hopeloos zijn. Want Ik kan de brief Waarin ik word afgezeked eigenlijk al die eens fatsoenlijk lezen Omdat hij zo juridisch is gesteld.

1 Quotations:

⊕ 1:167 ¶ 710 – 711, Mensen die dus een aanvraag doen voor schadevergoeding, krijgen de eerste afwijzing of een een zakge... in Interview Transcripts .docx

● PR Nee er is zeker wel weerstand vanuit de omgeving in Zuidwending (HR: Ja zeker)

1 Quotations:

⊕ 1:155 ¶ 683, Nee er is zeker wel weerstand is in Interview Transcripts .docx

● PR Vanmiddag hebben wij Een hoorzitting van praten met de Staten met de provincie Groningen over bodemdaling over Zuidwending En ja, Dat is denk ik ook interessant hoe de provincie ernaar kijkt. Uiteindelijk hebben die wel de macht om daar eisen aan te stellen en ook. Naar bewoners toe en belangenorganisaties van wanneer er in gesprek moet gaan worden.

1 Quotations:

- ☺ 1:157 ¶ 686, Maar concreet naar die zoutcavernes toe, Dat is zeker een onrust bij de bewoners en vanmiddag hebben... in Interview Transcripts .docx
- RC Als ik die de lokale bestuurders allemaal spreek: joh dit is het plan, kan je daaraan mee werken? Nou omdat ze je kennen kom je wel verder. En als zij zich erachter zetten dan kun je ook veel makkelijker met mensen in gesprek raken.
- 1 Quotations:
- ☺ 1:58 ¶ 245, Is ik die de lokale bestuurders allemaal spreek, die ken ik allemaal en met hen bespreek: joh dit is... in Interview Transcripts .docx
- RC De vraag is of Nederland het vertrouwt als ze weten dat ik (EZK) er voor verantwoordelijk ben. Ik heb dat proberen te ondervangen, een adviesraad die is er gekomen voor de geologische dienst met veel bredere samenstelling.
- 1 Quotations:
- ☺ 1:54 ¶ 232, De vraag is of Nederland het vertrouwt als ze weten dat ik er voor verantwoordelijk ben. Ik heb dat... in Interview Transcripts .docx
- RC En dat betekent dat je op bepaalde plaatsen terecht komt, ja die liggen ergens en toevallig in gebieden waar al eens eerder wat gebeurd is. Dus ja nu gaan gebruiken voor opslag, nou hoort wel bij dat je dat buitengewoon serieus aan de voorkant allemaal bespreekt nog voordat je er toen besloten hebt. En zegt kijk dit hebben we uitgezocht, dit is wat we daar willen om die en die reden.
- 1 Quotations:
- ☺ 1:42 ¶ 152, En dat betekent dat je op bepaalde plaatsen terecht komt, en dat kan zijn dat dat ook de plaatsen zijn... in Interview Transcripts .docx
- RC Er moet recht worden gedaan met mensen maar ook aan de operators. En dat betekent dat je open en transparant over schade bent. Je merkt ook dat mensen op het moment dat ze horen wat er wel aan de hand is veel meer begrip hebben voor het besluit wat dan volgt. Dus een laagdrempelig loket moeten hebben waar ze hun zaak kunnen melden en dat dan wordt gezegd oké wij nemen nu van u over.
- 1 Quotations:
- ☺ 1:48 ¶ 168, Er werd afgesproken er moet recht worden gedaan met mensen maar er moet ook recht worden gedaan aan... in Interview Transcripts .docx
- RC Er speelt ook een gevoel dat het toch een wingewest is.
- 1 Quotations:
- ☺ 1:56 ¶ 238, Er speelt ook een gevoel dat het toch een wingewest is. in Interview Transcripts .docx
- RC Er zijn altijd een aantal oorzaken voor wantrouwen. Ja we zijn minder gezagsgetrouw,. Vraag een second opinion zijn we ook gek op, vroeger werden dingen makkelijker geaccepteerd. Maar wat ook speelde is, bedrijven waren veel meer regionaal of lokaal gevestigd. Het waren niet allemaal multinationals die je niet kent of investeringsmaatschappijen.
- 1 Quotations:
- ☺ 1:50 ¶ 186, Er zijn altijd een aantal oorzaken voor. Ja we zijn minder gezagsgetrouw, en alles staat ter discuss... in Interview Transcripts .docx
- RC Ik geef het maar aan dat de tijdgeest ook ontzettend belangrijk is.
- 1 Quotations:
- ☺ 1:49 ¶ 182, Ik geef het maar aan dat de tijdgeest ook ontzettend belangrijk is. in Interview Transcripts .docx
- RC ik wil dus ook voor het mijnbouw beleid groot plan aan de voorkant hebben. Dat je naar dat plan kan verwijzen op het moment dat je naar mensen toe moet om te zeggen ik kom nu een project realiseren
- 1 Quotations:
- ☺ 1:40 ¶ 150, ik wil dus ook voor het mijnbouw beleid groot plan aan de voorkant hebben, met wat willen we in dit... in Interview Transcripts .docx
- RC In groningen heeft dit ministerie en ook de operator hebben het die hebben het verknoeid door heel juridisch te procederen tegen mensen en het hen heel moeilijk te maken om aan te tonen dat de schade die ze hebben volledig of gedeeltelijk is veroorzaakt door een mijnbouwactiviteit. Dat hebben wij als ministerie goed gevonden dat het heel lang zo ging. Dat heeft dus geleid tot echt woede, woede onder de Groningers die ik zeer goed begrijp
- 1 Quotations:
- ☺ 1:47 ¶ 168, In groningen heeft dit ministerie en ook de operator hebben het die hebben het verknoeid. Die hebben... in Interview Transcripts .docx
- RC Je hebt kennis nodig om echt volwaardig te kunnen participeren. Ook daar zit dus het woord vertrouwen nog achter he. Want de geologische dienst heeft de kennis, dat begint er wel mee dat mensen zeggen dat snappen wij dat is ook onze geologische dienst.
- 1 Quotations:
- ☺ 1:55 ¶ 232, Want je ziet al je hebt tijd nodig, je hebt kennis nodig om echt volwaardig te kunnen participeren.... in Interview Transcripts .docx
- RC Je moet aan de voorkant volstrekt helder maken waar ze wel of niet zeggenschap over hebben.
- 1 Quotations:
- ☺ 1:43 ¶ 154, e moet aan de voorkant volstrekt helder maken waar ze wel of niet zeggenschap over hebben. in Interview Transcripts .docx
- RC Kijk bij het participatie gaat het volgens mij altijd om drie dingen; waarom is deze activiteit überhaupt nuttig? waarom doen we het? waarom moet het hier kan het niet ergens anders? En als het dan hier gebeurt ja heb ik er dan effecten van, wat zijn die effecten?
- 1 Quotations:
- ☺ 1:38 ¶ 150, Kijk bij het participatie gaat het volgens mij altijd om drie dingen, mensen willen drie dingen wete... in Interview Transcripts .docx

- RC Mijn droom is een Winningsplan weigeren voor de geloofwaardigheid van het beleid. Die bedrijven sturen een zeer compleet verhaal. Ja als het dan voldoet aan alle wettelijke eisen dan krijgen ze het vergund. Ookal ziet er misschien nog een gebrek in krijg je altijd de kans om het gebrek te herstellen.

1 Quotations:

- ☺ 1:51 ¶ 202, Mijn droom is zeg ik ook wel eens tegen een operator is dat ik een keer iets kan weigeren. Daar droo... in Interview Transcripts .docx

- RC Nou er zijn veel mogelijkheden voor verkrijgen van participatie. De eerste is omwonende mee kunt laten delen in de revenuen van projecten dus. Dus windmolenparken en zonneweides. Het tweede is het inpassen van landschap binnen een project. 3e is omkopen met spiegeltjes en kraaltjes, dit deden we vroeger veel.

1 Quotations:

- ☺ 1:45 ¶ 157, Kijk wat wij zelf een van de mooiste elementen vinden is als je omwonenden mee kunt laten delen in d... in Interview Transcripts .docx

- RC Op het moment dat je ze dan verrast met een project ineens voor hun deur en daar moeten ze op reageren dan heb je het eigenlijk al verloren. Dus de kunst is dat er ook wel iets geweest is van een plan, dat je daarnaar kunt verwijzen, dat daaruit blijkt waarom het nuttig en noodzakelijk is, dat je daar ook inspraak op hebt gehad. Dan begin je in ieder geval neutraal dan heb je in ieder geval een basis dat je zegt, kijk dit project was gewenst en ik probeer het nu uit te voeren. En dan zijn mensen ook geïnteresseerd en willen best meedenken.

1 Quotations:

- ☺ 1:39 ¶ 150, Op het moment dat je ze dan verrast met een project ineens voor hun deur en daar moeten ze op reager... in Interview Transcripts .docx

- RC Toen had ik een agenda vol van mijn voorgangster met afspraken met operators. Zat helemaal vol, toe zei ik wanneer spreek ik nou de decentrale overheden? Ja dat stond niet in de agenda dus dat deden ze niet. Dus ik heb het nu een beetje omgedraaid, er is een platform opgericht door en voor gemeente.

1 Quotations:

- ☺ 1:57 ¶ 245, Toen had ik een agenda vol van mijn voorgangster met afspraken met operators. Zat helemaal vol, toe... in Interview Transcripts .docx

- RC Voorbeeld: Gaswinning bij Ternaard onder de Waddenzee. Ik heb ongeveer elke milieubeweging inclusief de waddenvereniging natuurlijk massaal tegen. Waarschijnlijk ook de publieke opinie massaal tegen. Ik heb alleen een wettelijk kader dat zegt je moet het beoordelen dat het veilig en verantwoord kan; dus als het kan dan mag het.

1 Quotations:

- ☺ 1:52 ¶ 206, nou laten we eens even een project nemen waar ik heel nadrukkelijk bij betrokken ben, gaswinning bij... in Interview Transcripts .docx

- RC We willen een afwegingskader maken binnen een jaar of 2. Het moet eigenlijk gewoon een kaart van Nederland zijn waar je inzoomt en duidelijk wordt wat je daar ondergronds zou willen, wat er zou kunnen en of we daarvoor kiezen of niet.

1 Quotations:

- ☺ 1:53 ¶ 221, an gaan we wel opstellen, gaan we wel een afwegingskader maken van wordt het groot dan ga ik dat als... in Interview Transcripts .docx

- SZ Als je kijkt naar de Omgevingswet, Als je ziet hoe wij doen, denk ik dat dat een beetje zo Bedoeld is. Dat je heel nadrukkelijk aandacht voor issues hebt voor Mensen dat je ze tijdig betreft hebt blijven betrekken. Ik denk dat dat aansluit bij de bedoeling van de omgevingswet

1 Quotations:

- ☺ 1:222 ¶ 964, Is je kijkt naar de Omgevingswet, Als je ziet hoe wij doen, denk ik dat dat een beetje zo Bedoeld is... in Interview Transcripts .docx

- SZ begonnen daar in 2005 - 2006. En daar is eigenlijk altijd wel goed aandacht geweest voor de omgeving. Publicatie In de lokale krant, daar is social media bijgekomen, wij organiseerde wel is wat, we sponsorde wel is wat. Dus eigenlijk gewoon vrij straight forward manieren, dat maar blijven herhalen en dus niet Alleen maar komen als er wat is of Als je een uitbreidt maar blijven terugkomen en aanspreekbaar blijven, dus eigenlijk een heel simpel Uitgangspunt daarbij rond hanteren.

1 Quotations:

- ☺ 1:203 ¶ 921, begonnen daar in 2005 - 2006. En daar is eigenlijk altijd wel goed aandacht geweest voor de omgeving... in Interview Transcripts .docx

- SZ Compressie in Wijngaarde. Dat was heel veel verzet. Het dorp is heel veel weerstand. We gingen te laat betrekken, dus eigenlijk Als het de beslissing al is genomen dan pas instromen met met lokale partijen. Gewoon met verkeerde plaatjes. De uitdrukken verkeerde moment, niet goed nagedacht.

1 Quotations:

- ☺ 1:229 ¶ 979 - 982, at was ook, dat hadden we wat minder groen aangepakt, wat minder handig, dus Dat was heel veel verze... in Interview Transcripts .docx

- SZ Dat is toch een lastig, we denken opzich goed. Er zijn er een 10, 15 Mensen die komen in onze avonden. Dat is het topje van de ijsberg. Er zit dus er zit een vrij onbekende Groep, waarvan je ook kan zeggen, ja, wat vinden die er eigenlijk van? Het eerlijke antwoord is, wij denken dat het aardig doen in die zin en dat zeggen Mensen ook die we tegenkomen Maar we spreken ook heel veel mensen nie, en wat die ervan vinden hebben we geen kijk op.

1 Quotations:

- ☺ 1:204 ¶ 925, Daar is het lastige beetje bij jou Misschien ook tegenaan lopen. Wij denken opzich wel goed. Er zijn... in Interview Transcripts .docx

- SZ Dat match natuurlijk niet helemaal. EZK coördinerend eigenlijk voornamelijk zichzelf, dus je moeten zorgen voor een ordelijk proces en dat willen wij in principe Ook. Wij hebben Natuurlijk het initiatief, dus wij willen dit graag, hè? Uiteindelijk moeten zij toetsen of het kan. Iedereen heeft andere rollen, EZK heeft ook nog een politieke agenda.

1 Quotations:

☺ 1:212 ¶934–936, Dat match natuurlijk niet helemaal, maar. Nee onze relatie met EZK in die zin Kijk, zij moeten het g... in Interview Transcripts .docx

- SZ De bestaande organisatie met contact is toch heel anders werken dan zoals CORE ENERGY is Natuurlijk nieuw. Die zitten heel anders in in In de wedstrijd. Ja, daar zal EZK anders mee omgaan. Die zullen meer begeleiding en aandacht nodig hebben.

1 Quotations:

☺ 1:224 ¶968, Ja, die zullen meer begeleiding en aandacht nodig hebben. Ik denk ook dat dat uitmaakt, zeg maar hè... in Interview Transcripts .docx

- SZ De dynamiek overal een beetje hetzelfde, zeg Maar het ligt eraan. Met welke initiatief kom je, in welk gebied is het en is daar al meer gebeurd.

1 Quotations:

☺ 1:228 ¶977, De dynamiek overal een beetje hetzelfde, zeg Maar het ligt eraan. Met welke initiatief kom je, in we... in Interview Transcripts .docx

- SZ Dit is ook 10 jaar geleden, toen waren we nog helemaal niet bezig met beleid rondom omgeving. Wat we hier bespreken, is geen vaste wetenschappen, vinden Mensen moeilijk. Als het goed is nu beleid voor, Maar dat is ook iets wat Je moet ontwikkelen. Misschien deed je het wel, maar nu denk je er wel meer gericht over.

1 Quotations:

☺ 1:230 ¶989, Dit is ook 10 jaar geleden, toen waren we nog helemaal niet bezig met beleid rondom omgeving. Ja, ma... in Interview Transcripts .docx

- SZ Er is wel een negatieve reactie op bijvoorbeeld Core Energy. Met dat Compressed Energy, Dat is nieuwe club. Die krijgt het altijd verduren. Daar zijn ook veel meer Mensen ook aanwezig.

1 Quotations:

☺ 1:206 ¶928, Er is wel een negatieve reactie op bijvoorbeeld soms op Nobyon maar ook op Core Energy, hè, wat er n... in Interview Transcripts .docx

- SZ Er speelt heel veel In het gebied hè, met alle stapeling van duurzame Activiteiten en van mijnbouwactiviteiten.

1 Quotations:

☺ 1:220 ¶960, . Er speelt heel veel In het gebied hè, met alle stapeling van duurzame Activiteiten en van mijnbouw... in Interview Transcripts .docx

- SZ Er zijn nooit grote problemen geweest. Geen explosie toestanden. Wel aardbevingen Ook In de zout cavernes

1 Quotations:

☺ 1:205 ¶927, Er zijn nooit grote problemen geweest. Geen explosie toestanden. Wel aardbevingen Ook In de zout cav... in Interview Transcripts .docx

- SZ Het transparant zijn is dan een basisvoorwaarde. En ja daar ook niet omheen draaien wat er nog meer aankomt, hè? Wat we ook voorzien, dus ook daar geldt ook die transparantie voor.

1 Quotations:

☺ 1:210 ¶932, Het transparant zijn is dan een basisvoorwaarde. En ja daar ook niet omheen draaien wat er nog meer... in Interview Transcripts .docx

- SZ Ik heb de indruk dat we hier voorlopen op de rest van Gasunie wat betreft omgevingsmanagement. Ook omdat het hele omgevingsmanagement nog een beetje in ontwikkeling is. Wij mogen onze eigen gang gaan hier.

1 Quotations:

☺ 1:219 ¶960, Wij hebben gewoon onze eigen, onze eigen sub wereldje zeg maar. En wij doen de dingen die goed is. D... in Interview Transcripts .docx

- SZ Je wil een goede buur zijn en op de grote issues duidelijkheid geven. Daar paste dus een aantal elementen onder: Veiligheid, landschappelijke inpassing, overlast van de installatie. We hebben ook een micro-seismic meetnetwerk geïnstalleerd, om eventuele aardbevingen te kunnen meten.

1 Quotations:

☺ 1:209 ¶932, e wil een goede buur zijn, dus Laten we dat even als overkoepelend thema hebben. Al die, je hebt gew... in Interview Transcripts .docx

- SZ Maak het niet te complex. Jan met de pet die wil gewoon geen gedoe en die wil gewoon eerlijk antwoorden. Het gaat om die hele bazale dingen. Eigenlijk gezegd, wij gaan het nu niet ingewikkelder maken dan dat.

1 Quotations:

☺ 1:226 ¶973, maak het niet te complex, want. Dat is echt zoiets Dit is gewoon een Opgeleid feestje met de Omgevin... in Interview Transcripts .docx

- SZ Natuurlijk ook voor Noubyon de afstand tot de fabriek in Delfzijl is belangrijk en daar gaat het zout heen, hè? Hier loopt zeg Maar de grote bundel van het hele Nederlandse netwerk loopt u op 2 km loopt u 5. 6 van de grootste gasleiding van het land voorbij, zeg maar Noord-Zuid, dus Dat is gewoon een heel strategisch punt.

1 Quotations:

☺ 1:216 ¶950, Natuurlijk ook de afstand tot de fabriek in Delfzijl is belangrijk en daar gaat het zout heen, hè? D... in Interview Transcripts .docx

- SZ SZ In de participatieladder scoren wij in zuid wending In de hoogste rangen. Ik heb zelf contact met de gemeente en provincie. Waterschap is iets minder aanwezig. Om aan te geven, zeg maar wat we ook gaan doen met die informatieavond welke vergunningen aanvragen lopen ook afstemming over dat meer van nou dat we Mensen willen betrekken. Dus dat contact is vrij intensief en ook met EZK ook op alle terreinen over de rijkscoördinatie-regeling, maar ook beleidsmatig is het kaartje toen het beleid bepale.

1 Quotations:

☺ 1:227 ¶975, k heb zelf contact met de gemeente en provincie. Waterschap is iets minder aanwezig. Maar ik heb ech... in Interview Transcripts .docx

- SZ We krijgen van EZK wel de ruimte om dat op onze manier te doen. Dat lijkt me ook gewoon verstandig, want Wij hebben contact In het gebied. EZK in Groningen heeft Natuurlijk de hele rode lap op een stier associatie. Dat is met de rijkscoördinatie regeling gekomen. Dus ook dat woord rijkscoördinatie regeling omgevingsmanagement en EZK. Dat roept allemaal gedag op en zelfs een emoties bij Mensen, dus Ik denk dat het verstandig is als wij gewoon vooroplopen.

1 Quotations:

☺ 1:214 ¶ 940, We krijgen van EZK voor mij wel de ruimte om dat op jouw manier te doen. Dat lijkt me ook gewoon ver... in Interview Transcripts .docx

- SZ We proberen ons wel zoveel mogelijk Begripvol op te stellen. Dat is wel een kernwaarde volgens mij.

1 Quotations:

☺ 1:211 ¶ 932, e proberen ons wel zoveel mogelijk Begripvol op te stellen, dus Dat is. Dat is wel een kernwaarde vo... in Interview Transcripts .docx

- SZ Zo'n caverne maken dat duurt nu 7 jaar. Er moet ook afzet zijn, je moet ook wat met dat zout. Het is duidelijk dat er meer vraag is dan Dan dan dat er nu is qua aanbod.

1 Quotations:

☺ 1:218 ¶ 957 – 958, en ook zo;n caverne maken dat duurt nu 7 jaar. Dus en je hebt een zoutfabriek in, Delfzijl en Hengel... in Interview Transcripts .docx

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1 Quotations:

☺ 1:46 ¶ 157, Nou ja het is een natuurlijk een waaier aan mogelijkheden he. Kijk wat wij zelf een van de mooiste e... in