

Refracted Reflections

Perceptions of Gender Inequality
in Dutch Energy Organisations



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Kirsten Mallant
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Kirsten Mallant

Student number: 4572823

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Graduation committee

Chairperson : Dr. J.R. (Roland) Ortt, Economics, Technology and Innovation
First Supervisor : Dr. J. (Jenny) Lieu, Organisation and Governance
External Supervisor : Dr. M. (Mariëlle) Feenstra, 75inQ



Preface.

The energy industry is a cornerstone of modern civilisation, playing a key role in shaping the social and economic development of countries. And now, with a rapidly changing climate threatening our current way of life, the energy industry faces another monumental challenge. Despite the importance of this challenge, gender inequality in the energy industry and elsewhere limits women's ability to contribute to the solution and benefit from the outcomes. As a result, my Master's thesis aims to further explore the intricacies of gender inequality in the energy industry, understand perceptions of it, and explore strategies for steering towards a more equitable future.

While I initially assumed that my interest in this topic was rooted in my personal perspective as a woman, writing this thesis has given me a newfound objectivity. It has given me a more strategic understanding of the nuances of gender inequality - an invaluable perspective that expands my knowledge and provides critical insights. Through this thesis, I aim to provide a comprehensive exploration of the multifaceted perceptions of gender inequality within the energy sector. It is my hope that this work will serve as a compass to guide a diverse audience, regardless of their ties to the sector, towards a future where equity is more than an aspiration - it's a lived reality.

A while ago I heard a song containing the lyrics "women also deserve a chance at being corrupt leaders". Despite being an obviously satirical take on gender inequality, I think the song conveys an additional message on the subject. The need for gender equality is often argued from a perspective of utility, or lack thereof - equality should lead to increased participation, cooperation, and productivity. However, I think, much like the song's satirical authors, that equality should from the core be a human axiom. We all, inherently, deserve the opportunity at being human, in its fullest complexity, with all the triumphs and failings, the beauty and ugliness that entails. We should have the liberty to showcase not just our strengths and virtues, but also our flaws and weaknesses. Gender equality should not be seen as a means to achieve societal efficiency, but rather as a basic principle of fairness and justice, an inherent birthright of every human being. It is in this light that the song's phrase "women also deserve a chance at being corrupt leaders" strikes a powerful note, underlining that women, like men, should have the freedom to embody a range of human experiences and roles, be they virtuous or corrupt. In other words, it is not merely about the right to do good or perform well, but also about the right to err, the right to be fully human. The purpose of this thesis, therefore, is to explore the perceptions on gender inequality, not from a utilitarian or efficiency standpoint, but from the standpoint of individual autonomy and human dignity.

Acknowledgements.

As I reflect on the journey of this thesis, I find it fitting that the title, 'Refracted Reflections', mirrors the collective efforts, perspectives and support that have gone into its creation. Like the multifaceted reflections of light, this research is a product of numerous inputs.

Firstly, I owe a huge thanks to my grandmother, sisters, housemates, and Jolijn whose unwavering support, boundless inspiration and endless patience with countless conversations on the subject have been invaluable. It's no coincidence that you all represent the embodiment of empowerment.

I also extend my gratitude to the women and men who graciously contributed their time and perspectives through the survey and interviews for this research. Your resilience, strength, and determination continue to inspire not just me, but countless others in our collective quest towards a future where all voices resonate, and all efforts are rightfully acknowledged.

I am particularly grateful to my parents, whose contributions to this study have been crucial. Without their support I wouldn't have been able to even start this thesis. My deepest thanks to Lauren, whose critical perspectives have continually stimulated my thinking and helped me to improve the quality of this research. I am grateful to Sanne and Anouk, whose creativity and ability to imagine the impossible have been a source of constant inspiration. I am also very grateful to Anouk Creusen, who has been instrumental in connecting me with the right people to make this research more meaningful and enriching.

Completing this thesis has been a journey of insight and enjoyment, made all the better by the remarkable team of supervisors I have had the privilege of working with. I am extremely thankful to my supervisors for their guidance, mentorship, and faith in my abilities. To Roland Ortt, who generously took on this project outside his usual research focus, providing me with the necessary distant perspective to broaden my understanding, I am truly grateful. My deepest appreciation goes to Marielle Feenstra, whose enthusiasm, endless ideas, and motivation have been a constant driving force throughout this journey. Lastly, but by no means least, I owe a great debt to Jenny Lieu, who provided unwavering support in our weekly discussions and feedback sessions. Her consistent challenges pushed me to excel and reach the best of my capabilities.

As I conclude this journey, I take pride in stating that every topic of our endless conversations found its way into this thesis. All of you, perhaps unknowingly, have contributed significantly to this work. Your personal stories, your perspectives, and even the observation of your daily lives have been sources of true inspiration. 'Refracted Reflections' is not just a reflection of my research but also a reflection of all of you - your insights, your experiences, and your support.



Thereby, I would like to express my sincere gratitude to Instituut Gak for their significant contribution to this research. Their commitment to improving the quality of social security in the Netherlands through financial support for research, projects, and professorships has been important to the successful completion of this study. For more information about their important work, I encourage readers to visit their website at www.instituutgak.nl. Their contribution has not only enriched this study but also greatly benefited the broader academic community.

Executive summary.

PURPOSE

Addressing the issue of gender inequality in Dutch energy organisations has become increasingly important, but understanding the complex interplay of personal factors and various aspects of gender inequality that contribute to the perception of this wicked problem remains a challenge. This study aims to explore the refracted reflections of gender inequality among employees in Dutch energy organisations by examining the metaphorical prisms formed by societal, organisational, and individualistic aspects. This multi-dimensional analysis seeks to identify aspects contributing to gender inequality, to show the interdependencies of the issue, and to highlight potential intervention points for implementing change while considering the dynamic interaction between the prisms and personal factors.

DESIGN/METHODOLOGY/APPROACH

A qualitative transdisciplinary case study approach was used to explore perceptions of gender inequality within Dutch energy organisations. Data collection methods included in-depth interviews with gender experts and employees, an employee survey, conversations with researchers, and observations at relevant events. The research design incorporated theoretical frameworks such as problem framing and process-based decision making to guide the study. Content analysis was used to identify patterns, relationships and trends in the data collected, providing a comprehensive understanding of the societal, organisational, and individualistic aspects that contribute to gender inequality.

FINDINGS

The study resulted in the development of a novel, comprehensive framework that presents the interplay of wicked problem perceptions through the metaphorical prisms formed by societal, organisational, and individualistic aspects. The framework suggests that mental representations of experienced problem situations, informed by the personal factors of environment, knowledge, and intersectionality, influence cognitive processes such as assumptions and awareness. These mental representations shape the perceptions of the issue, which then determines prioritisation of certain aspects. The framework acknowledges the existence of causal loops between assumptions, awareness, and prioritisation, as well as the dynamic interaction with personal factors.

PRACTICAL IMPLICATIONS

The comprehensive framework derived from this study provides valuable insights for Dutch energy organisations and other industries seeking to address gender inequality by understanding and addressing the underlying aspects and personal factors that shape employees' perceptions. This knowledge can be used to design targeted interventions, organisational policies and practices that promote a more inclusive and equitable work environment.

ORIGINALITY/VALUE

This thesis presents an original approach to understanding gender inequality in Dutch energy organisations, a representative case for other male-dominated technical sectors. It offers a novel, comprehensive framework that captures the interplay of societal, organisational, and individualistic aspects with personal factors to show how perceptions of gender inequality emerge. The value of this research lies in its transdisciplinary approach and its applicability in facilitating real-world interventions and strategies to mitigate gender inequality.

Table of contents.

1. INTRODUCTION	11	6.1.2 Organisational culture	51
1.1 Research Focus	11	6.1.3 Policies and Variation	52
1.1.1 Introducing the case	11	6.1.4 External Catalysts	53
1.1.2 Case-specific challenges	11	6.2 Analysing Aspects to Assemble Prism	54
1.1.3 Reflection on the research	12	7. EXAMINING THE INDIVIDUALISTIC PRISM	57
1.1.4 Main objective	12	7.1 Individualistic Aspects	57
2. LITERATURE REVIEW	15	7.1.1 Awareness	57
2.1 State of Gender Inequality in Dutch Energy Organisations	15	7.1.2 Resemblance	59
2.2 Interplay of Interconnected Prisms	16	7.1.3 Individual Differences	59
2.3 Path to Organisational Change	17	7.1.4 Gender Characteristics	60
2.4 Challenges to Structural Interventions	18	7.2 Analysing Aspects to Assemble Prism	61
2.5 Intersection of Prisms, Change, and Challenges through Problem Framing	19	8. DISCUSSION	65
2.6 Research Gap and Research Question	21	8.1 Link between Subject and Master Program	65
3. RESEARCH APPROACH AND METHODOLOGY	25	8.2 Answers to Sub-Questions	65
3.1 Research Approach	25	8.2.1 Sub-Question 1	65
3.1.1 Research Design	25	8.2.2 Sub-Question 2	67
3.1.2 Transdisciplinary Approach	25	8.2.3 Sub-Question 3	68
3.1.3 Case Study Approach	26	8.3 Answer to Main Question	69
3.1.4 Theoretical Frameworks	26	8.4 Limitations	73
3.1.5 Quality	26	8.5 Reflection on the Research Approach	73
3.2 Research Methodology	27	8.5.1 Dutch energy organisations	73
3.2.1 Data Collection Methods	27	8.5.2 Transdisciplinary research	73
3.2.2 Research Methodology Integration	29	8.5.3 Survey	74
3.2.3 Data Analysis	29	8.5.4 In-depth Interviews	74
3.2.4 Ethical Considerations	30	8.5.5 Observations at events	74
3.2.5 Answering the sub-questions	30	8.5.6 Conversations with researchers	75
3.2.6 Answering the main question	33	8.6 Reflection on the Research Quality	75
4. THEMATIC REVIEW: PROBLEM FRAMING AND GENDER INEQUALITY	37	8.6.1 Validity	75
4.1 Search Description	37	8.6.2 Reliability	75
4.2 Exploring Personal Factors	38	8.6.3 Positionality	75
4.2.1 The Impact of Environment on Gender Inequality Perceptions	38	8.7 Future Research	76
4.2.2 The Role of Knowledge in Shaping Gender Inequality Perceptions	39	9. CONCLUSION	79
4.2.3 How Experience Shapes Gender Inequality Perceptions	39	9.1 Summary of Research Objective and Methodology	79
4.3 Synthesis of Personal Factors	39	9.2 Summary of Findings	79
4.4 Setting the Scene	40	9.3 Scientific Contribution	80
5. EXAMINING THE SOCIETAL PRISM	43	9.4 Societal Contribution	80
5.1 Societal Aspects	43	BIBLIOGRAPHY.	84
5.1.1 Gender-based assumptions	43	A. GLOSSARY	92
5.1.2 Historical Influences	45	B. LIST OF EVENTS	93
5.1.3 Power Imbalance	45	C. INTERVIEWS GENDER EXPERTS	95
5.1.4 National Cultural Influence	46	C.1 Interview Questions Gender Expert	95
5.2 Analysing Aspects to Assemble Prism	47	C.2 Interview Summaries Gender Experts	96
6. EXAMINING THE ORGANISATIONAL PRISM	49	D. SURVEY QUESTIONS	102
6.1 Organisational aspects	49	E. INTERVIEWS EMPLOYEES	104
6.1.1 Strategy	49	E.1 Interview Questions Employees	104
		E.2 Interview Summaries Employees	105

List of Figures.

Figure 1. Visualization of the different prisms through which one can perceive gender inequality	17
Figure 2. Conceptual framework of problem framing adapted from Pearce and Ejderyan (2020)	20
Figure 3. Flow of scoping literature about gender inequality in Dutch energy organisations	22
Figure 4. The guiding process to relevant literature for the thematic review (highlighted in orange)	28
Figure 5. Nested Diagram of Research Methods Mapped onto Societal, Organisational, and Individualistic Prisms	29
Figure 6. Chapter structure outlining objectives, methods, questions, and outcomes	34
Figure 7. The first step of problem framing adapted from the conceptual framework of Pearce and Ejderyan (2020)	37
Figure 8. Depiction of the Societal Prism: Key Aspects and Sub-Aspects Encircling the Central Theme	44
Figure 9. Depiction of the Organisational Prism: Key Aspects and Sub-Aspects Encircling the Central Theme	50
Figure 10. Depiction of the Individualistic Prism: Key Aspects and Sub-Aspects Encircling the Central Theme	58
Figure 11. The societal part of the metaphorical arena of wicked problem perceptions	66
Figure 12. The societal and organisational part of the metaphorical arena of wicked problem perceptions	67
Figure 13. The metaphorical arena of wicked problem perceptions	68
Figure 14. The Arena - visual representation of the interplay of wicked problem perceptions	69
Figure 15. The novel framework that presents the interplay of wicked problem perceptions through the metaphorical prisms formed by societal, organisational, and individualistic aspects	70

List of Tables.

Table 1. Adjusted from Wynn (2020) Individualistic, Organisational, and Societal Prisms through which gender inequality can be perceived	17
Table 2. A two-dimensional model for interventions adapted from Benschop and Verloo (2010)	18
Table 3. Adjusted from Wynn (2020) interventions coupled to prisms through which one can perceive gender inequality	20
Table 4. Gender experts interviewed with their corresponding energy experience and study background	31
Table 5. Demographic information of the survey respondents	32
Table 6. Interviewed employees with their gender, seniority, type of organisation and job position	33
Table 7. Selected papers for thematic review on assessing problem framing and gender inequality	37
Table 8. Main societal aspects found in the data supported by illustrative quotes	46
Table 9. Main organisational aspects found in the data supported by illustrative quotes	53
Table 10. Main individualistic aspects found in the data supported by illustrative quotes	61

1. Introduction

The Netherlands is facing an undeniable labour shortage crisis. In the autumn of 2022, the Central Bureau of Statistics (CBS) recorded more than 449,000 job vacancies - a figure that has doubled in just two years (CBS, 2023). This shortage, exacerbated by the pandemic and largely driven by an ageing population, has left almost every industry in the country desperate for more skilled workers (Lambregtse, 2022). At the same time, the effects of climate change have become increasingly urgent and visible in the Netherlands. The country's ambitious climate agreement aims to reduce CO2 emissions by 49% by 2030 and 95% by 2050 (Ministerie van Economische Zaken en Klimaat, 2022), requiring a rapid transition from fossil fuels to sustainable energy sources. The International Renewable Energy Agency (IRENA) predicts that global renewable energy jobs will grow from 10.3 million in 2017 to 29 million by 2050 (IRENA, 2019). Opinion leaders and politicians agree: the Dutch labour force must expand to meet this shortage and support the energy transition (Duijn & van Huisseling, 2023; Rijksoverheid, 2023), a move that could also advance women's emancipation. Alarmingly, the Netherlands ranks at 28th in global gender equality (World Economic Forum, 2022), with women earning 13% less per hour than their male counterparts (CBS, 2022b). Almost half of Dutch women are financially dependent on a partner or the government (CBS, 2022c), and at the current rate it will take another 88 years to achieve gender equality in the country (Women Inc., 2022).

Despite efforts to implement organisational interventions that promote gender equity and indirectly address the labour shortage, the energy sector remains one of the least gender diverse industries in the Dutch economy (Creusen et al., 2023). Women make up 47% of the total workforce (CBS, 2022a), but only 22% of the workforce in the Dutch energy sector (Feenstra & Creusen, 2021). In addition, women in management positions leave these positions more than ever before, with the gap between men and women in more powerful positions widening (McKinsey & LeanIn.Org, 2022). Perceptions of gender inequality can be unique to each individual, as they are influenced by personal factors like experiences, knowledge, and environment (Pearce & Ejderyan, 2020). This results in refracted reflections of the issue's extent, causes, and implications. Research suggests that a lack of understanding of the extent and causes of the issues is one of the main reasons for the limited effectiveness of diversity interventions (Benschop & Verloo, 2006; Colley et al., 2021a; Krentz et al., 2019). Therefore, further research into the interplay of personal factors and aspects of gender inequality that contribute to the perception of employees of Dutch energy organisations is necessary for progress.

1.1 RESEARCH FOCUS

Using a transdisciplinary case study approach is an ideal way to gain a detailed understanding of social and organisational processes (Cassell & Symon, 2014). Gender inequality is a broad topic that concerns many aspects in an organisation, such as the number of women, recruitment, and promotion opportunities. The focus on one of these aspects in this thesis is deliberately left open, as the decision to focus on one or more aspects partially answers the research question(s).

1.1.1 INTRODUCING THE CASE

The Dutch energy sector is crucial to the successful transition from fossil fuels to sustainable energy sources (Ministerie van Economische Zaken en Klimaat, 2022). The energy transition requires a diverse and inclusive workforce to tackle the complex challenges associated with the transition from fossil fuels to sustainable energy sources (Creusen et al., 2023). Moreover, gender-balanced teams can provide unique perspectives and experiences that contribute to more effective interventions, thereby promoting a just and equitable energy transition for all stakeholders (Jenkins, 2018). Therefore, increasing women's participation in the energy sector is essential to harness untapped human capital, foster innovation and promote sustainable development during the energy transition (IRENA, 2019; Kiviniemi, 2015). Furthermore, the Dutch energy sector landscape is dominated by a few large companies, which are the main stakeholders in the energy transition decision-making process (Energievergelijk.nl, 2023a; Grol, 2019).

1.1.2 CASE-SPECIFIC CHALLENGES

In the Netherlands, the flow of women from technical studies to technical jobs is extremely low, at only 17% (Feenstra & Creusen, 2021). Although this is a big challenge for gender balance in the energy sector, this study focuses on the organisation as the subject of change. Although gender encompasses not only men and women, but also non-binary identities, this study will focus primarily on the binary of cisgender men and women when referring to the literature and will attempt to take a broader approach in its own methods.

1.1.3 REFLECTION ON THE RESEARCH

As a highly educated, 25-year-old white researcher, it is important to acknowledge the inherent limitations of my study, which focuses primarily on a demographic similar to my own. While awareness is a critical first step, it does not equate to meaningful action. Throughout this research, I have endeavoured to include not only survey data, but also interviews and participated in events with individuals from diverse backgrounds. By choosing gender inequality as the subject of my thesis within a technical, male-dominated university, I sought to turn awareness into tangible progress and begin a journey towards a more inclusive and equitable future.

1.1.4 MAIN OBJECTIVE

Addressing the issue of gender inequality in Dutch energy organisations has become increasingly important, but understanding the complex interplay of personal factors and various aspects of gender inequality that contribute to the perception of this wicked problem remains a challenge. This study aims to explore the refracted reflections of gender inequality among employees in Dutch energy organisations by examining the metaphorical prisms formed by societal, organisational, and individualistic aspects. This multi-dimensional analysis seeks to identify aspects contributing to gender inequality, to show the interdependencies of the issue, and to highlight potential intervention points for implementing change while considering the dynamic interaction between the prisms and personal factors.

2. Literature Review

The literature review offers an extensive synthesis of the current knowledge on gender inequality, focusing on its presence in Dutch energy organisations, organisational change, challenges, problem framing, and the research gap that leads to the research question. The structure of this chapter is illustrated in Figure 3 at the end of this chapter.

2.1 STATE OF GENDER INEQUALITY IN DUTCH ENERGY ORGANISATIONS

The effects of climate change have become increasingly urgent and visible in the Netherlands. The transition from fossil fuels to sustainable energy sources is essential in limiting global warming. In the Netherlands, the Climate Agreement of the Netherlands expresses ambition to reduce CO₂ emissions by 49% in 2030, rising to 95% in 2050 (Ministerie van Economische Zaken en Klimaat, 2022). In the new Climate Agreement, the need for a more gender inclusive approach to human capital within the energy transition is mentioned. The success of this goal necessitates collective effort and a diverse labour market.

The energy sector is one of the nine top sectors in the Netherlands. A top sector is one in which Dutch industry and research centres worldwide excel. In 2019, 148 000 full time jobs were in place (CBS, 2018). Of these jobs respectively 40%, 30% and 20% were in conventional energy, renewable energy, and network operators. The energy sector is an all-encompassing term that in this research describes the companies that produce and distribute energy. There are 60 energy production companies in the Netherlands (Energievergelijk.nl, 2023a), and although the largest proportion is owned by other countries, Dutch organisations in this research stand for organisations located in the Netherlands. There are 6 energy distribution companies in the Netherlands (Energievergelijk.nl, 2023b), which are called network operators. When looking at the market share of these energy organisations, it is apparent that over 90% is possessed by eight large corporations (Energievergelijk.nl, 2023b; Grol, 2019). This means the stakeholders of the decision-making in the Dutch energy transition are mainly employed in large corporations.

The Dutch energy industry is persistently male-dominated, as evidenced by the significant gender gap in terms of employment. Women make up 47% of the total workforce (CBS, 2022a), yet they only account for 22% of the Dutch energy sector workforce (Feenstra & Creusen, 2021). This gap in a sector that is facing a contraction in labour market and challenge of an accelerating transition to sustainable energy systems can be seen as a wastage of human capital and therefore should be addressed to increase GDP, competitiveness, economic growth, and job creation (Kiviniemi, 2015). IRENA has conducted research that suggests that the number of jobs in the renewable energy sector is projected to grow from 10.3 million in 2017 to almost 29 million by 2050 (IRENA, 2019). This substantial increase demonstrates the growth of the energy sector in response to the global energy transition and highlights the need for a well-trained and qualified workforce to meet the rising demand. Making inclusive decisions about the energy transition and designing and implementing appropriate interventions requires insight into the technical, economic and social challenges of energy transition (Feenstra & Creusen, 2021).

Addressing gender inequality has many benefits beyond meeting the growing demand for labour. Tackling this pervasive issue can lead to:

- Improved financial performance: Studies have shown that organisations with greater gender diversity tend to have better financial performance (Herring, 2009; Krishnan & Park, 2005). This may be due to the diverse perspectives and experiences of a gender-balanced workforce, which contribute to better decision-making and overall organisational performance.
- Enhanced innovation and team performance: Research has shown that gender-diverse teams are more innovative and perform better than male-only teams (Gratton & Erickson, 2007; Woolley et al., 2010). The presence of diverse viewpoints and experiences in such teams fosters creative thinking, effective problem solving and optimal use of individual strengths, leading to superior team performance.
- Promoting social justice and human rights: Addressing gender inequality is consistent with the broader goals of social justice and human rights (United Nations, 2015). Gender equality is a fundamental human right, and promoting it contributes to a fairer and more just society. By ensuring equal opportunities for all genders, organisations can create an inclusive work environment that respects and upholds the rights of all individuals, regardless of gender.

To successfully meet the requirements of the future energy system, attention must be paid to the social context within which technological innovations take place. Those responsible for conceptualizing and executing the transition—with their sensitivity to societal resonance—are key to achieving an energy system that is equitable, sustainable, and beneficial for all (Feenstra & Creusen, 2021). Energy justice has three dimensions (Jenkins, 2018): distributional justice,

which examines spatial discrepancies in energy access and externalities generated by energy production; procedural justice, which appraises the governance and decision-making procedures of energy; and recognition justice, which concentrates on unequal representation of stakeholders.

The Dutch energy system is undergoing a transition towards decentralisation, characterised by a shift from centralised to localised energy production. This transition will lead to significant socio-economic changes (Straver et al., 2018). At the same time, addressing gender diversity has become a legal and ethical imperative for companies in the country. The implementation of legal quotas for gender diversity has been limited to listed companies and set as an aspiration for large companies (SER, 2022). Despite these efforts, the representation of women in leadership and other roles remains disproportionately low (Merens, 2022). Furthermore, contemporary business entities are increasingly expected to demonstrate ethical business practices and corporate social responsibility (Cacace et al., 2015; Grosser & Moon, 2019), with gender diversity and inclusion being an integral part of such efforts.

2.2 INTERPLAY OF INTERCONNECTED PRISMS

Extensive research has identified various barriers that women face in the workplace, including gender stereotypes and unconscious biases that contribute to underrepresentation (Bohnet, 2016; Heilman, 2001), work-life balance challenges due to caregiving responsibilities (Bianchi et al., 2012; Budig et al., 2015), discrimination and harassment that negatively impact career trajectories and well-being (Berdahl & Aquino, 2009; Willness et al., 2007), a lack of female role models and mentors (Ibarra et al., 2010), gendered occupational segregation that perpetuates the gender pay gap (Blau & Kahn, 2017), and organisational culture and policies that inhibit diversity and inclusion (Ely et al., 2011).

The theoretical debate about the cause of gender inequality has been ongoing since the 1970s, with policymakers and academics looking for the ideal content and form of change strategies to promote gender equality (Benschop & Verloo, 2010). To apply the right intervention and have 'a framework for seeing inequality' (Britton & Logan, 2008) a systematic view can be adopted. Sociologist Joan Acker (Acker, 1990, 1992) uses the concepts of structure, culture, interaction, identity, and organisational logic as integral processes that contribute to the perpetuation and creation of inequality within organisations, which she refers to as the 'gendered organisation' - a theoretical framework that highlights how organisational practices and processes are imbued with gendered assumptions and expectations, thereby reinforcing existing inequalities.

Wynn (2020) extends on the organisational processes underlying gender inequality described by Acker (Acker, 1990, 1992) by defining the three most prominent, as he calls them, ideologies of gender inequality: individualistic, organisational, and societal. I argue the term ideology in this setting, which is defined as 'cultural beliefs that justify particular social arrangements' (Macionis, 2010) and often refers to political beliefs, could be replaced with the term 'prism'. This is because a metaphorical prism captures the multifaceted nature of gender inequality, as it demonstrates how individualistic, organisational, and societal aspects refract and interact to create unique perceptions of gender inequality for different individuals. The term 'prism' emphasizes the dynamic and complex nature of the problem, whereas 'ideology' may imply more rigid and unchanging beliefs. The individualistic prism of gender inequality can be characterized by the sameness-difference debate. Where the individual is the source of inequality, and the gender difference is explained as women and men being fundamentally different. For example, gender differences in assertiveness, interests, and skills contributing to unequal gender outcomes form arguments for this prism (Hyde, 2014; Rosenbloom et al., 2008). The organisational prism, on the other hand, chooses the organisational policies and processes as the source of inequality. According to this line of debate, men and women are treated differently by the organisation. This view is supported by evidence of male-favouring hiring practices and quantitative performance ratings that enable decision makers to reinforce pre-existing bias (Brink et al., 2016; Rivera & Tilcsik, 2019). Lastly, the societal prism pinpoints the broader society as the source of inequality. Through socialization, boys and girls develop differently, which may lead to disparities between genders in adulthood (Zosuls et al., 2011). According to this prism, girls may be discouraged from exploring or expressing interest in technology, leading to fewer women pursuing careers in the energy industry.

When comparing the three prisms as stated by Wynn (2020), one mechanism between the different prisms could be added. According to Cech and Blair-Loy (2010) the dominant mechanism explaining gender inequality in labour market outcomes of the United States is meritocracy. In a meritocratic organisation, those who have the proper talent, dedication, and expertise are expected to be successful while those who do not reach the same level of success are responsible for their own failure (Castilla & Benard, 2010). An argument for gender inequality from a meritocratic

Table 1. Adjusted from Wynn (2020) Individualistic, Organisational, and Societal Prisms through which gender inequality can be perceived

Prism	Individualistic	Organisational	Societal
Sources of inequality	Personal attribution of individual men and/or women	Organisational processes or policies	The broader society
Gender differences	Men and women are different (internalized)	Men and women are treated differently by the organisation (structural)	Men and women are socialized differently by the larger society (cultural)

perspective would be that women are simply not motivated to be in leadership roles. By adding the meritocratic mechanism, all interactions with systems around women are included in possible explanations for gender inequality in organisations. The prisms, with their sources and gender differences are summarized in Table 1.

After reviewing the literature, my interpretation is that although the three prisms are often seen as separate, they are connected as visualised in Figure 1. System dynamics recognizes that a complex system, such as an organisation, is not merely a compilation of its parts, but rather a unified, interdependent whole (Lansu et al., 2019). The boundaries of the system are defined by the purpose of the discussion (Meadows & Wright, 2008).

Over the past two decades, substantial research has been conducted on gender-related issues in organisations, examining both their causes and effects. While the literature broadly identifies the issues surrounding gender inequalities, there are far fewer papers that discuss or demonstrate effective interventions (Belingeri et al., 2021; Lau et al., 2022). This discrepancy can be attributed to the fact that it is easier to study the status quo than to explore changes in it. Despite the implementation of policies and corporate initiatives to disrupt and leave the gendered organisation behind (Eriksson-zetterquist & Styhre, 2008), the energy industry remains one of the least gender-diverse sectors in the economy. It can be stated that 'a paradigm shift from problems to solutions is critical and urgent' (Lau et al., 2022) to make organisational change happen. I argue unravelling the complexities of multifaceted issues such as gender inequality is often more difficult than solving the issue itself and cannot be overlooked in solving it.

2.3 PATH TO ORGANISATIONAL CHANGE

Organisational change is a complex phenomenon that can take many forms. Research on why and how organisational change is needed is widespread, but a definition is often avoided (Quattrone et al., 2001). Using a search engine, one of the definitions reads "the actions in which a company or business alters a major component of its organisation" (Stobierski, 2020). Organisational change can be triggered by internal or external factors, such as technological advancements, changes in customer needs and preferences, or shifts in the competitive landscape. In order to remain competitive, organisations must be flexible and adaptive in responding to these changes. Contemporary business entities face increased pressure to demonstrate ethical business practices and corporate social responsibility (Cacace et al., 2015; Grosser & Moon, 2019), of which diversity and inclusion of gender is an essential component.

Strategies for gender equality in organisations are

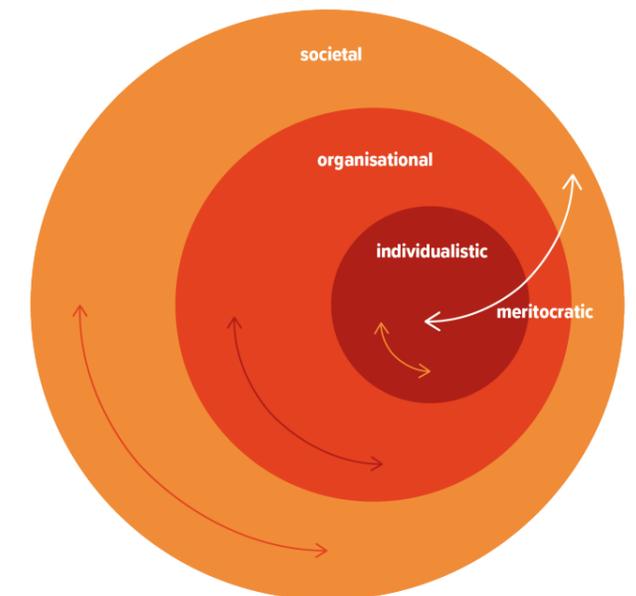


Figure 1. Visualization of the different prisms through which one can perceive gender inequality

expressed in interventions. Interventions can be classified in multiple ways. Benschop and Verloo (2010) summarized these classifications, as can be seen in Table 2, by separating the individual and structural approach in inclusion, re-evaluation, and transformation interventions.

Table 2. A two-dimensional model for interventions adapted from Benschop and Verloo (2010)

	Inclusion	Re-evaluation	Transformation
Individual	LIBERAL/TRADITIONAL Equip the woman	MANAGING DIVERSITY Value difference	
Structural	RADICAL Create equal opportunity		TRANSFORMATIVE Change gender as structure, f.e. gender mainstreaming

The **individual/inclusion** intervention focuses on individual women maximizing their potential to survive and thrive in organisations and societies. Change is aimed at improving women’s skills so that they are better equipped to compete with men, a ‘fixing women’ approach. Examples of interventions include management development, mentoring and training programmes.

The **individual/re-evaluation** intervention focuses on the need to reappraise notions of equality and difference. This strategy celebrates gender differences and sees them as a resource for organisations and society. This approach typically uses mission statements about the value of an inclusive organisational culture (Kunda, 1992).

Research has shown that instead of emphasizing “classic femininity,” which upholds traditional gender categories and does not address the unequal power relations between them, individual initiatives lack to “equip” males for more gender equal workplaces and communities (Benschop & Verloo, 2010).

The **structural/inclusion** intervention is the radical equality strategy, which focuses on resetting opportunity structures for women and elevating equality of outcomes to the forefront of its priorities (Kirton & Greene, 2021). Measures associated with this strategy include positive discrimination, for example, by applying quotas and preferential treatment. A create equal opportunity strategy recognizes the existence of structural barriers, identifies organisational structures as the primary issue, and seeks to level the playing field. This tactic addresses bias in hiring, promotion, and evaluation practices. Transparent hiring procedures and flexible work schedules are typical examples of measures.

The **structural/transformation** intervention is promoted as being “ideal” and “transformative” in that it addresses and seeks to alter the structure of gender. An example of this is gender mainstreaming, which tries to improve organisational procedures and practices by getting rid of gender prejudices from regular routines. This approach encourages a large number of people to alter gender relations in various organisational settings (Stratigaki, 2005). Yet, the social dynamics necessary for the success of this strategy call for collaboration between feminists and politicians to the point where “gender” and “the mainstream” accept a shared problem definition (Benschop & Verloo, 2006; Lombardo et al., 2009).

2.4 CHALLENGES TO STRUCTURAL INTERVENTIONS

Previous studies have identified how the complexity of an organisation (Burke, 2018; Kalpazidou Schmidt & Ovseiko, 2020) and implementation problems (Benschop & Verloo, 2006; Eriksson-Zetterquist & Renemark, 2016; Evans, 2014) have stalled structural interventions. Some studies have identified other challenges such as the lack of organisational commitment to change (Cortis et al., 2022), resistance (Colley et al., 2021b) and not including all stakeholders (Benschop & Verloo, 2010; Bleijenbergh & van Engen, 2015).

Organisational commitment is essential in facilitating structural interventions to address gender inequality in the

workplace (Palmén & Kalpazidou Schmidt, 2019). Leaders are in a position to initiate and direct these interventions, but through sticking to existing structures and practices (Cortis et al., 2022), they reinforce the status quo. According to system justification theory, people have a strong motivation to perceive themselves and their social structures favourably, and therefore tend to see the system in which they operate as fundamentally fair (Jost & van der Toorn, 2012). These assumptions mask the gendered nature of other practices and are disseminated through narratives (Ely & Meyerson, 2000). The presumptions, preferences, and interests that underlie these narratives are normalized and accepted by organisational members through retelling (Mumby, 2009). Furthermore, criticism of systems, such as questioning an organisation’s commitment to equality, can increase people’s motive to justify the system (Proudfoot & Kay, 2014). It is therefore a challenge for employees in organisations to be committed to changing their own systems, and it is easier to be resistant to change.

The potential of resistance to explain the gap between policy and successful implementation of interventions has been emphasized by multiple researchers (Lombardo, 2013; B. H. Martin & MacDonnell, 2012). Four types of resistance to interventions in the workplace have been identified: gender neutrality, where men and women’s experiences are not distinguished; gender suppression, where the issue is acknowledged but not addressed; gender blindness, where there is little to no acknowledgement of the issue; and a general sense of gender fatigue, where people believe gender equality has already been attained and that additional initiatives are no longer required (Colley et al., 2021b).

Studies have further identified that ineffectiveness of interventions can arise from not engaging with all stakeholders. Interestingly, the lack of inclusion of all stakeholders can already be seen in research. While stakeholders include everyone affecting or affected by a business’ operations and performance, often only managers or certain groups of women are used to study gender inequality in organisations (Benschop & Verloo, 2010; Bleijenbergh & van Engen, 2015). Even when describing stakeholders in general. Based on a careful evaluation of the literature, I construe that this limited scope may be due to the emotionally and personally charged nature of gender inequality as a subject. I think that it is more convenient to focus only on managers or women who are experiencing issues, as it may be perceived as ‘risky’ for others to express their opinions on the matter. Despite the ability to outline various challenges from the literature, it remains unclear why these issues cannot be readily resolved.

2.5 INTERSECTION OF PRISMS, CHANGE, AND CHALLENGES THROUGH PROBLEM FRAMING

A global survey encompassing 16,500 employees from various industries revealed that although 95% of respondents indicated their employers have implemented diversity interventions, a mere 25% of diverse employees have experienced any benefits from these initiatives (Krentz et al., 2019). This research suggests that the primary reason for the ineffectiveness of such interventions lies in the decision-making senior leaders—predominantly older men—who may lack a comprehensive understanding of the magnitude and location of the issues, thus impacting their investment and funding choices concerning diversity interventions.

The development of a mental representation of an issue situation is a product of a person’s experiences, knowledge, and environment, called the personal factors. From this mental representation, problem definitions arise which in turn determine the goals and criteria for a solution. Based on the theory of problem solving developed by Newell and Simon (1972), these steps together can be a conceptual framework for problem framing (Pearce & Ejderyan, 2020), as depicted in Figure 2.

In considering the literature, my interpretation suggests that the metaphorical prisms can be an integral part of problem framing, as these beliefs can shape how a problem is defined, approached, and can influence the types of solutions proposed that either reinforce or challenge gender inequalities (Cech & Blair-Loy, 2010). Those who blame inequalities on individual inadequacies may reject interventions intended to reduce unequal opportunities or outcomes; those who attribute differences to structural issues may be more likely to accept them. Wynn (2020) provides evidence that the prism of ‘high-level executives’ in Silicon Valley regarding the origins of inequality are connected to certain types of interventions, as demonstrated in Table 3. He suggests that their largely individualistic views of gender inequality led to favouring of interventions that focus on the micro-level over those that address larger systemic issues. However, the interconnected nature and interplay of the individualistic, organisational, and societal prisms seem to be missing from the conceptual framework, which I aim to address with this study and incorporate for a more comprehensive understanding of gender inequality.

Gender inequality is a wicked problem, as it involves complex and multifaceted aspects that are difficult to define,

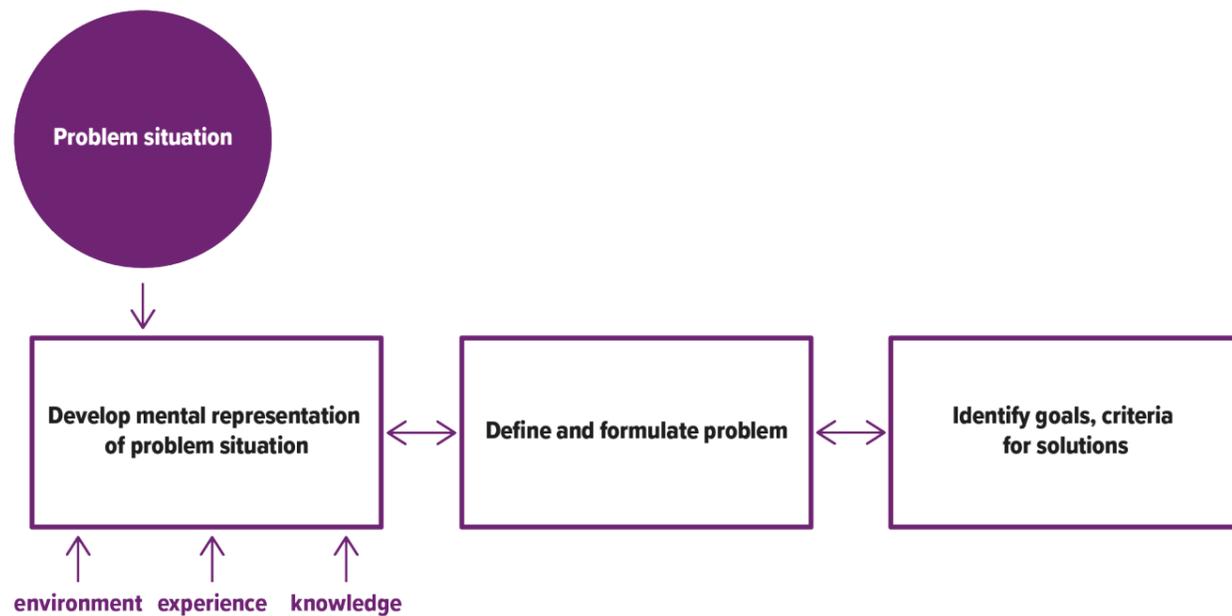


Figure 2. Conceptual framework of problem framing adapted from Pearce and Ejderyan (2020)

understand, and solve (Rittel & Webber, 1973). Wicked problems are characterized by their interconnectedness, resistance to resolution, and the absence of clear solutions (Van Bueren et al., 2003). There is no single, universally recognized problem definition when it comes to gender inequality. As noted by Lincoln and Guba (1985), there is only a perception of a wicked problem which varies from individual to individual within networks. A perception is 'the organisation, identification, and interpretation of sensory information in order to represent and understand the presented information or environment' (Schacter et al., 2011). Personal factors shape the perception, resulting in refracted reflections of the issue's extent, causes, and implications. In order to effectively address gender inequality, I argue it is crucial to extend the framework of problem framing to understand the underlying mechanisms that contribute to its persistence.

Only a few studies have sought to connect the challenges of commitment, resistance and including all stakeholders to perceptions of gender inequality of employees. The study of Colley et al. (2021) about resistance of middle managers to gender equality in the public sector state in the discussion that 'while individual commitment and good intent was evident, action was stymied by narrow understandings of the causes of gender inequality'. Benschop and Verloo (2006) point to perceptions shortly in their discussion as well stating, 'the choice of gender neutrality as the main goal of the project enabled a seemingly joint problem definition at a discursive level, but in reality, a split occurred'. Concluding in the end 'a more profound problematization of the genderedness of organisations was largely avoided, due to the anticipated resistance'. From the analysis of these findings, my reading is that the perceptions of gender inequality remain unclear, as does the origin of different perspectives.

Table 3. Adjusted from Wynn (2020) interventions coupled to prisms through which one can perceive gender inequality

Prism	Individualistic	Organisational	Societal
Target of change	Employees	The organisation	The broader society
Intervention	Mentorship and development programs, and bias training and workshops	Diversity and equity policies, recruitment and promotion practices, and pay equity audits	Education programs, legal reforms, and public awareness campaigns

2.6 RESEARCH GAP AND RESEARCH QUESTION

Addressing the issue of gender inequality in Dutch energy organisations has become increasingly important, but understanding the complex interplay of personal factors and various aspects of gender inequality that contribute to the perception of this wicked problem remains a challenge. Aspects are components of a particular issue, in this case, gender inequality. These aspects can be societal, organisational, and individual and together form metaphorical prisms through which gender inequality can be seen and understood. Filling the research gap by exploring employees' perceptions of gender inequality allows for a more nuanced and rounded approach to tackling this pervasive issue in organisations, taking into account the interplay between these various aspects and personal factors.

This research aims to investigate gender inequality in Dutch energy organisations through a thorough, multidimensional analysis, using individual, organisational, and societal prisms. This methodology facilitates the identification and discussion of the various aspects that contribute to gender inequality in these organisations. It also highlights the complexity of the issue by emphasising the interdependencies between different aspects of the issue and personal factors. Finally, by examining the issue through perceptions, this research will identify specific areas where change can be implemented, and potential intervention points can be targeted.

On this basis, the main research question is formulated as follows:

How do perceptions of gender inequality among employees in Dutch energy organisations emerge from the interplay of societal, organisational, and individualistic aspects, as well as personal factors?

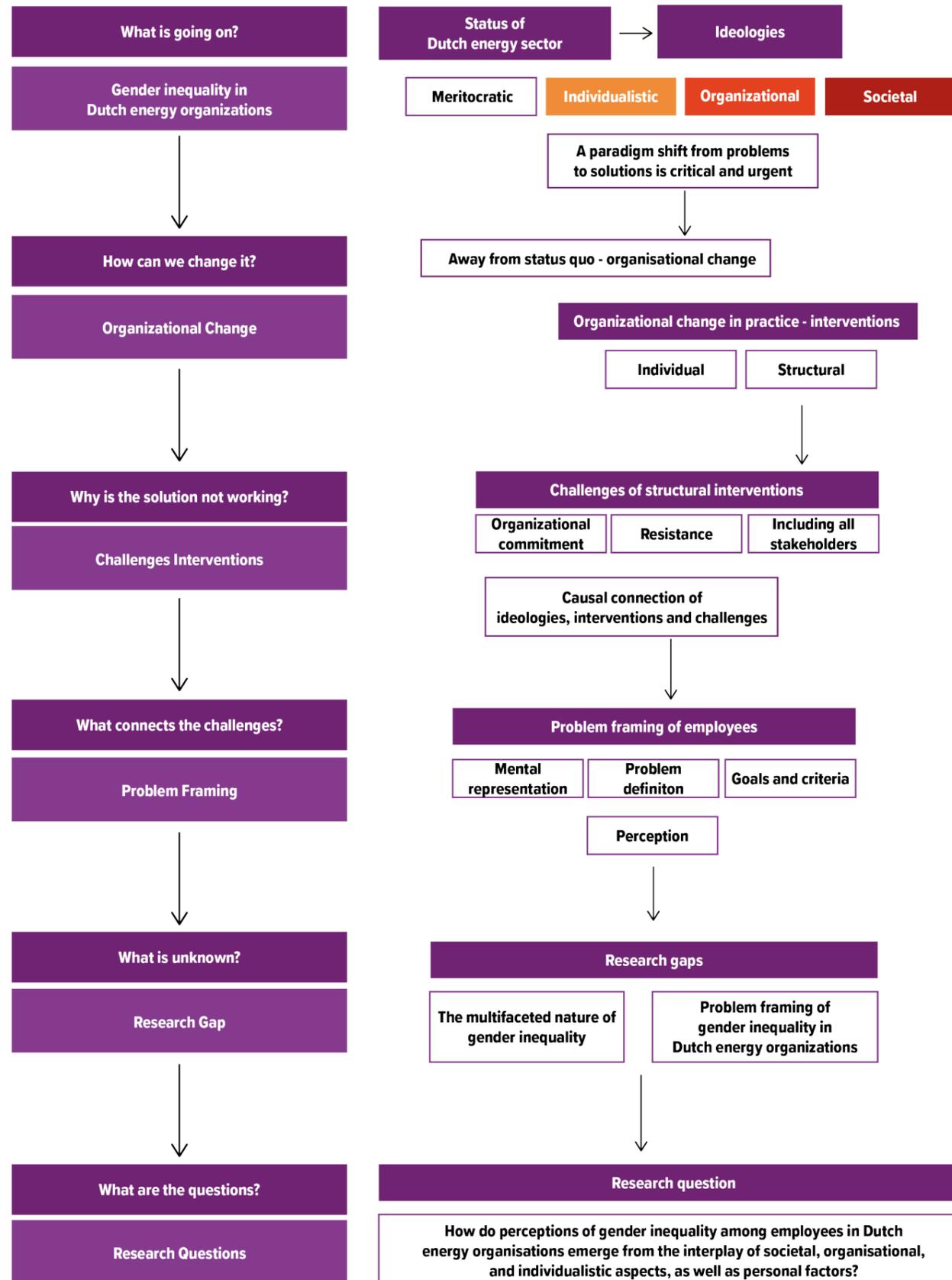


Figure 3. Flow of scoping literature about gender inequality in Dutch energy organisations

3. Research Approach and Methodology

This thesis will answer the following main research question:

How do perceptions of gender inequality among employees in Dutch energy organisations emerge from the interplay of societal, organisational, and individualistic aspects, as well as personal factors?

To answer this question, the following sub-questions are formulated:

- SQ1.** Which *societal* aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?
- SQ2.** Which *organisational* aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?
- SQ3.** Which *individualistic* aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?

Aspects are components of a particular issue, in this case, gender inequality. These aspects can be societal, organisational, and individual and together form metaphorical prisms through which gender inequality can be seen and understood. These prisms are not static, as they constantly interact with each other and personal factors, such as individual experiences, environment, and knowledge, among others.

This chapter will first describe the overall research approach before moving on to the specific methods that will be used to address the sub-questions.

3.1 RESEARCH APPROACH

In this sub-section, the research approach adopted to investigate the perceptions on gender inequality among employees in Dutch energy organisations will be discussed and justified. The sub-section provides an overview of the research design, the transdisciplinary and case study approaches, theoretical frameworks, and quality considerations that guided this study. Due to the intersectionality of this research, reflection on the position of the researcher is important (Creswell, 2013). This is done in sub-section 3.1.5.

3.1.1 RESEARCH DESIGN

The research design for this study employs a qualitative transdisciplinary case study approach, incorporating observations at events, conversations with researchers, a survey with 74 respondents and 12 interviews to comprehensively explore the issue of gender inequality within Dutch energy organisations. The participants in the survey and interviews include gender experts and employees from Dutch energy organisations with varying job titles and seniority levels, representing all genders. Conducting the research at 75inQ, a centre of expertise on gender and energy, presents a unique opportunity to access a vibrant community of over 500 Dutch women actively involved in various policy, research, and decision-making roles in the Dutch energy transition. Additionally, the 75inQ LinkedIn platform, which includes over 1300 women, provides an extensive network for this study. This wide reach contributes to a comprehensive research base, allowing for a more in-depth exploration of gender inequality within the Dutch energy sector. Additionally, this study adopts an intersectional perspective, examining how gender is influenced by and interconnected with factors such as contemporary cultural forces and seniority, which can result in fluctuating power dynamics and oppression (Rice et al., 2019).

3.1.2 TRANSDISCIPLINARY APPROACH

Gender inequality is a wicked problem, characterized by its complex and multifaceted nature, which makes it difficult to define, understand, and resolve (Rittel & Webber, 1973; Van Bueren et al., 2003). Addressing such a wicked problem in an organisation necessitates considering multiple stakeholders and value conflicts. A transdisciplinary approach was adopted to address this complexity, accommodate diverse perspectives, integrate abstract and case-specific knowledge, and generate knowledge relevant for sustainable development (Pohl et al., 2021).

The transdisciplinary research process links two knowledge production processes: a social process in which actors work to understand and address a particular social problem, and a scientific process in which researchers design and conduct studies on this problem (Pohl et al., 2017). A research project must contribute to three outcome spaces to be considered transdisciplinary (Mitchell et al., 2015): improving the situation for both researchers and practitioners, creating and disseminating knowledge artefacts, and mutual and transformative learning for those involved in and affected by the research.

In this study, the literature reviews draw on a variety of sources to cover both societal and scientific aspects of knowledge. These sources include journals from different fields of knowledge, such as the Journal of Organisational Behaviour, Sustainability Science and EclinicalMedicine, as well as books such as Invisible Women, Gender Works and The Women's History of the World. Consultancy reports (e.g., BCG and McKinsey) and news sites (e.g., De Correspondent, HBR and NOS) were also consulted. To ensure the inclusion and representation of multiple relevant perspectives, interviews were conducted with gender experts and stakeholders from a wide range of academic backgrounds. This approach is also in line with the transdisciplinary framing of research questions, which combines scientific and practical ways of thinking (Pohl et al., 2017).

Recognition injustice refers to a form of injustice that occurs when the identity, experiences, or contributions of an individual or group are not recognised, valued or respected by others (Fraser, 2000). This appears to be the case for stakeholders in energy organisations who are not managers or scientists (Benschop & Verloo, 2010; Bleijenbergh & van Engen, 2015). Transdisciplinary research seeks to overcome disciplinary biases (Rosenfield, 1992) by connecting academic knowledge with marginalised perspectives (Zurba et al., 2021). As a result, the experiential and contextual knowledge of diverse stakeholders is respected on an equal basis with scientific knowledge (Scholz, 2000).

3.1.3 CASE STUDY APPROACH

Using a qualitative case study approach is an ideal way to gain a detailed understanding of social and organisational processes (Cassell & Symon, 2014). This approach is best suited for the research subject because a how question is posed, the researcher has no control over events and the focus is on a contemporary issue within a real-life context (Yin, 2013). Dutch energy organisations are suited as the subject of this case study because of the male-dominance of the energy sector (Clancy & Feenstra, 2019) and its required profound transformation due to the energy transition (Cherp et al., 2011).

3.1.4 THEORETICAL FRAMEWORKS

The theoretical frameworks used in this study include problem framing and process-based decision making. These frameworks form the basis of the research design and data analysis and guide the investigation of gender inequality in Dutch energy organisations.

Problem framing involves the process of constructing a mental representation, defining and formulating a wicked problems, while also identifying the goals associated with solving the problem (Pearce & Ejderyan, 2020). This framework emphasises the importance of understanding the different mental representations of an issue in order to develop effective and tailored interventions. By adopting problem framing as a theoretical framework, this study seeks to explore the different ways in which gender inequality is perceived within Dutch energy organisations, taking into account the interplay between personal factors and multiple aspects that contribute to the issue.

Process-based decision making, on the other hand, focuses on influencing different perceptions of the issue (Lincoln & Guba, 1985). This framework emphasises the importance of negotiated knowledge. Negotiated knowledge refers to the co-creation of knowledge and understanding through the collaboration of different stakeholders, including experts and employees. By integrating process-based decision-making into the research design, this study aims to identify the perceptions that drive or hinder the prioritisation of solving gender inequality in Dutch energy organisations.

3.1.5 QUALITY

In intersectional feminist research, it is crucial to consider the positionality of the researcher within the study (Creswell, 2013). Alongside this, several other criteria can be employed to assess the quality of qualitative research (Creswell, 2013). For this thesis, the quality assessment will incorporate not only the positionality evaluation but also the examination of validity and reliability.

Positionality

This research adopts an intersectional approach, as it investigates the influence of gender on equal opportunities within an organisation, taking into account other factors affecting access, such as seniority. Concerning positionality, I recognize that I meet six of the seven checkpoints of privilege outlined by Luyendijk (2022). Apart from gender, I have been granted numerous structural advantages in society. Consequently, it is essential for the quality of this research

to actively listen to individuals of all genders who do not share the same privileges. By doing so, I can gain a more comprehensive understanding of the case, viewing it through a broader and more inclusive image.

Validity

To ensure the validity of this research, triangulation is employed by utilizing various sources of data to address the research questions. By incorporating multiple resources, including literature, conversations with researchers, events, diverse stakeholders in interviews, and survey results from a larger sample, the research findings are anticipated to present an accurate depiction of the prevailing perceptions of gender inequality in Dutch energy organisations. Although the research timeframe was limited, resulting in a smaller sample size compared to the sector overall, the findings can still serve as a basis for identifying crucial areas for improvement within the sector. This is due to the diversity of methods and employees in terms of organisations, gender, job positions, seniority, and the inclusion of overarching perspectives from gender experts and researchers.

Reliability

The interviews were conducted using a semi-structured approach, which might pose challenges for other researchers attempting replication. To increase opportunities for replication, all interview and survey questions can be found in Appendix C.1, D and E.1. To ensure accuracy and comprehensive information capture, all interviews were transcribed. Moreover, a multi-method approach was employed to enhance the reliability of the study, including observing events, conversations with researchers, interviews, and surveys. By using these four methods, the research findings were cross-validated and potential biases reduced, ensuring a more robust understanding of the research topic. The survey was designed with reliability in mind, featuring logically structured questions and coded responses to generate a reliable dataset. The data was also cross-referenced with relevant literature sources to further strengthen the reliability and validity of the study.

3.2 RESEARCH METHODOLOGY

This sub-section presents the research methodology employed in this study to investigate the perceptions of employees in Dutch energy organisations concerning gender inequality. The data collection methods, and data analysis techniques are discussed, emphasizing how they align with the research question and objectives. Additionally, ethical considerations and limitations associated with the chosen methods are addressed. Prior to conducting the second literature review on problem framing of gender inequality, a scoping process was undertaken (Arksey & O'Malley, 2007). The scoping process, as illustrated in Figure 4, outlines a set of topics and corresponding questions, which facilitate a more effective exploration of the research questions. The full overview of the complete research process, objectives, and methods used in each chapter of this thesis is shown in Figure 6 at the end of this chapter.

3.2.1 DATA COLLECTION METHODS

In-depth interviews

To gain a more in-depth understanding of their perceptions and experiences, 12 in-depth interviews were conducted with six gender experts and six employees from Dutch energy sector organisations with varying job titles and seniority levels, representing all genders. In-depth interviews are an invaluable tool for the exploration of issues in detail and the generation of insights that may not have been accessible through other methods (Boyce & Neale, 2006). They are particularly useful when the research aims to understand the perceptions and experiences of a specific group or population. An interview guide was developed to ensure consistency across the interviews, while still allowing for flexibility in the discussion that can be found in Appendix C.1 and E.1.

Survey

A survey was carried out among employees from organisations in the Dutch energy sector to gain insight into their perceptions of gender inequality. The survey aimed to collect data on employees' views, experiences, and opinions on who should address gender inequality. The survey was distributed electronically via the LinkedIn platform and mailing list of 75inQ, reaching out to their extensive network of members. Additionally, it was personally shared by Marielle Feenstra and Anouk Creusen, directors of 75inQ, who have respectively over 500 connections and over 2000 followers. The survey was also shared on the Amsterdam Smart City platform and within the companies of several members of the 75inQ community, further expanding the reach of the research and facilitating a more diverse and comprehensive dataset. To allow respondents to provide more detailed information, the survey included both closed and open-ended questions which can be found in Appendix D. In total, 74 responses were obtained, providing a broader perspective on the issue and complementing the findings from the interviews.

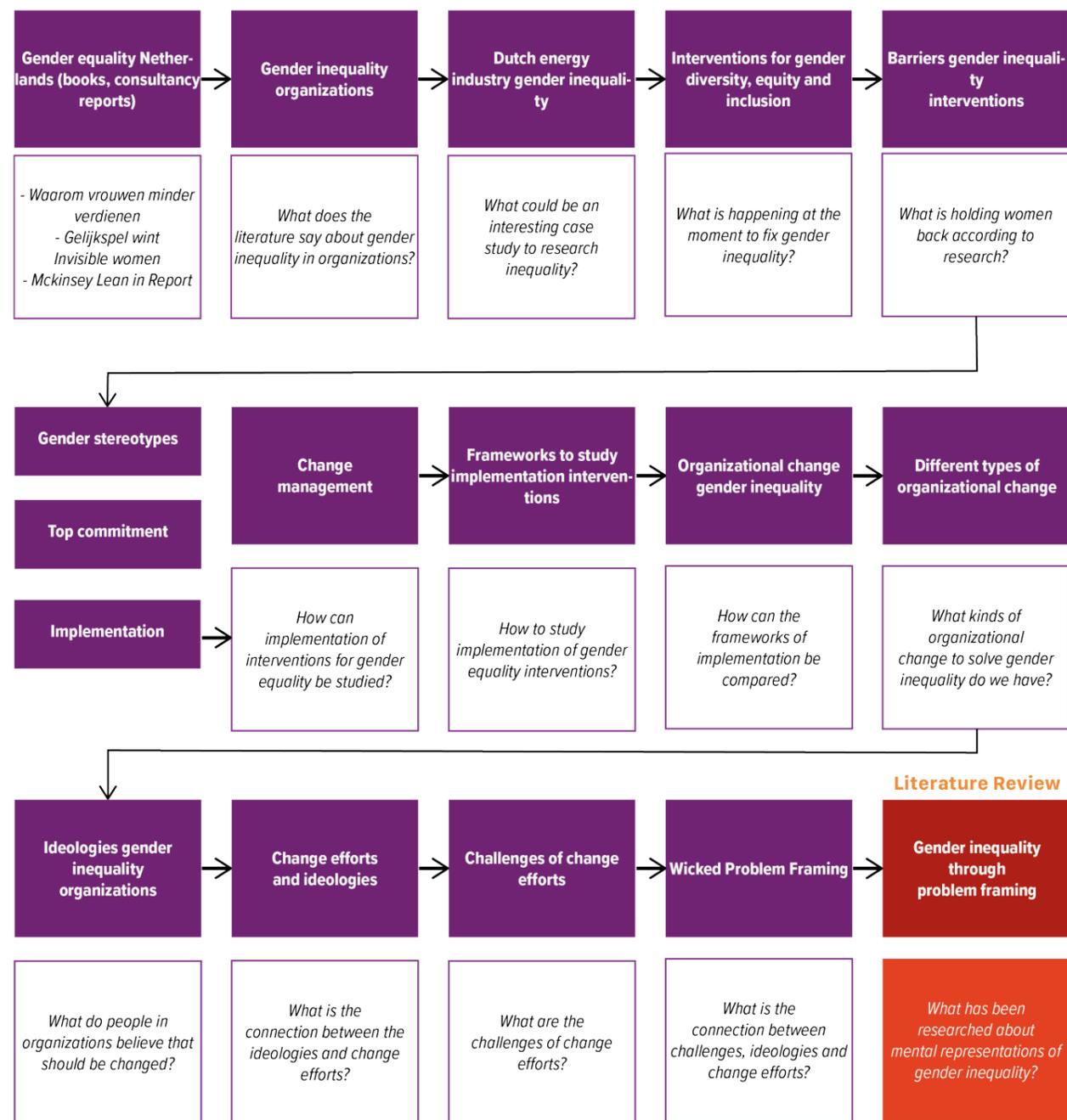


Figure 4. The guiding process to relevant literature for the thematic review (highlighted in orange)

Observations at events

In addition to interviews and surveys, the researcher attended several events focused on women in the energy sector to gather first-hand data and opinions on gender inequality in the industry. These events, which are listed in Appendix A, featured inspiring speakers and panel discussions that provided valuable insights into the experiences and challenges faced by women in the energy sector. In addition, attending these events provided an opportunity to engage in conversations with employees and make contacts for potential interviews (Bryman, 2016). Although the discussions and presentations from these events were not transcribed, they served as supplementary material, enriching the researcher's understanding of the context and informing the interpretation of the interview and survey

data (Flick, 2018). This observational approach contributed to a more comprehensive understanding of the wicked problem of gender inequality within Dutch energy organisations.

Conversation with researchers

Throughout the research process, in addition to utilizing surveys, interviews, and attending events, the researcher engaged in numerous conversations with researchers in the field to deepen their understanding of the subject matter. Conversations were held with Philippa Groome, a doctoral research student specializing in diverse talent management within organisations and focusing on improving gender policy through innovation. Further discussions were held with Jet van Eeghen, a thesis student at TU Delft researching company culture and recruitment practices that might impact gender imbalance within the construction industry, and Saravana Kumar Elango, another thesis student at TU Delft researching women's leadership development. The researcher's supervisors, Jenny Lieu, and Marielle Feenstra provided additional expertise and inside throughout the research process.

3.2.2 RESEARCH METHODOLOGY INTEGRATION

In this study, a transdisciplinary approach was adopted, utilizing a variety of research methods that synergistically and effectively integrated with one another. As per transdisciplinary research theory, researchers and practitioners involved bring unique perspectives and epistemologies, referring to specific ways of organizing the world and interpreting what they observe (Pohl et al., 2021). In Pohl's et al. (2021) paper, these perspectives are treated as thought-styles. Thought-styles arise and are maintained by a group of individuals constituting a thought-collective. Individuals become part of specific thought-collectives by learning to perceive through certain prisms. The methods for researching prisms in transdisciplinary research are often unspecified (Pohl et al., 2021). Therefore, a hypothetical connection between the prisms and methods was established to focus on specific aspects of the societal, organisational, and individual prisms.

As depicted in Figure 5, each method, in conjunction with its participants, contributed to a more comprehensive understanding of gender inequality's various aspects. Gender experts are at the intersection of all prisms through which gender inequality is perceived because they possess an extensive understanding of the issue's multifaceted nature. Their profound knowledge, combined with their experience in working with diverse stakeholders, allows them to recognize the complex interplay between these prisms. The literature, as discussed in Chapter 4 Thematic Review, primarily addresses the individual and societal prisms. Conversations with researchers mainly shed light on the organisational and societal prisms, as these researchers often adopt a more holistic approach in conversations. By examining broader structural and systemic aspects of the issue, they can identify patterns, trends, and underlying factors contributing to gender inequality across various settings.

The survey illuminates the organisational prism, as it aims to capture a wide range of experiences, perceptions, and opinions of individuals within a specific organisational context. Events showed the refraction of the societal prism, as they often involve discussions, presentations, and networking opportunities revolving around broader social, cultural, and political aspects of gender inequality. These events bring together participants from diverse backgrounds, including academics, policymakers, and practitioners, facilitating the exchange of ideas, sharing of experiences, and collaboration on strategies to address societal-level challenges related to gender inequality. Employee interviews are used to see the individualistic prism, as they provide a platform for understanding personal experiences, perceptions, and opinions of individuals within organisations. This methodological alignment with the prisms allows for a methodological contribution and a deeper exploration of the different aspects of gender inequality, capturing the nuances and complexities inherent in the issue.



Figure 5. Nested Diagram of Research Methods Mapped onto Societal, Organisational, and Individualistic Prisms

3.2.3 DATA ANALYSIS

Content analysis is a systematic and objective research

method used to analyse written, oral, or visual communication messages, such as interview transcripts and open-ended survey responses, in relation to a research question or topic (Erlingsson & Brysiewicz, 2017). The process begins with the selection of relevant material, which is then broken down into smaller units of meaning. These units are condensed, retaining the core meaning while shortening the text. The researcher then assigns a code, a label that accurately describes the condensed unit of meaning, and groups related codes into categories based on content or context. Categories are manifest content, expressing factual aspects of the data and answering questions about who, what, when or where. When a large number of codes are generated, sub-categories may be formed, which are then grouped into categories. Themes emerge from two or more categories, expressing the underlying latent content and answering questions about why, how or in what way.

In this study, content analysis was used to examine the transcriptions of the interviews conducted with the participants and the open-ended responses from the survey. First, the researcher made summaries of the interviews which can be read in Appendix C.2 and E.2 and read through the survey results, forming clusters based on a gut feeling. Content analysis was then applied to the full dataset to refine and systematically analyse the data to identify patterns, relationships and trends. This process facilitated the comparison of identified themes and categories, ultimately enabling the creation of a new framework to address the research question. The findings are reported in a clear and concise manner in the research findings chapters 5, 6 and 7.

3.2.4 ETHICAL CONSIDERATIONS

The main ethical risk of conducting in-depth interviews and a survey about explanations of gender inequality is the potential for harm to the interviewees and respondents. Interviewees and respondents may feel vulnerable and exposed when discussing gender inequality and may experience negative emotions from the experience. In addition, the researcher must be careful to ensure that their questions do not perpetuate bias and that their own opinions do not influence the answers they receive.

Interviewees are given a consent form prior to the interview, which explains the purpose of the interview, the risks, data protection and the option to withdraw from the interview. A summary will be provided to each interviewee afterwards to ensure that the information disclosed during the interview is accurate and that their views are respected, these can be found in Appendix C.2 and E.2. The survey also explained a short consent form. Only the researcher will have access to the data collected, and it will be anonymized to ensure that participants' identities remain confidential. Supervisors of 75inQ may access the data if needed for verification purposes.

3.2.5 ANSWERING THE SUB-QUESTIONS

This research seeks to address three interrelated sub-questions that explore the multidimensional aspects of gender inequality. These sub-questions are essential for a comprehensive understanding of the underlying societal, organisational, and individualistic aspects that contribute to the issue of gender inequality. The sub-questions are presented at the beginning of this chapter. The different methodologies – conversations, events, gender expert interviews, employee survey and employee interviews - will adopt a funnel approach to address each sub-question: societal, organisational, and individual. This approach does not rigidly limit the sub-questions to a single data source, but rather acts as a guideline for systematically exploring and understanding the research topic.

The literature, together with events and conversation with researchers are used to examine the boundaries within which the issue can be framed and to identify potential classifications for seeing gender inequality. Due to the volume of literature on this topic, the literature review was divided into two chapters. Chapter 2 provides a scoping review of the general literature on gender inequality. Chapter 4 examines the literature on personal factors of problem framing for specific groups, such as senior managers, women in STEM and students.

SQ1. *Which societal aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?*

After examining the boundaries within which the issue can be framed, SQ1 attempts to gain a comprehensive understanding of the societal prism through which one can perceive gender inequality within Dutch energy organisations by involving gender experts in interviews. Table 4 provides an overview of the background of the interviewees. The researcher opted for a diverse selection of gender experts, including those with and without experience in the energy sector, in order to obtain a holistic overview from different perspectives. Gender experts with

Table 4. Gender experts interviewed with their corresponding energy experience and study background

	Experience with energy industry	Experience with gender-related work	Philosophy	Facility Management	Language studies	Law	HRM	Finance
Expert 1	X	X		X				
Expert 2	X	X				X		X
Expert 3		X				X		
Expert 4		X	X					
Expert 5	X	X			X			
Expert 6	X	X					X	

experience in the energy sector provided specific insights into Dutch energy organisations based on their personal experiences, while other gender experts provided a broader contemporary context.

Identification of the gender experts

A gender expert in this research is defined as 'an individual with feminist knowledge regarding the cause-and-effect relationship between policies, actions, and/or activities and gender inequalities, and is formally requested to provide his or her knowledge and services' (Hoard, 2015). The researcher chose different backgrounds for the transdisciplinary approach.

The interviewed gender experts

Gender experts in- and outside energy organisations were selected by initial advice of Anouk Creusen, a knowledgeable expert on gender and energy and executive director of 75inQ. Besides that, a LinkedIn search was performed for the main players in the Dutch diversity field. For example, through SER Diversiteit. In total 10 gender experts were approached, of which 9 responded, which led to 6 interviews.

Interview format

The interviews consisted of open-ended questions asked in a semi-structured manner. Questions were used to determine which categories from the literature were confirmed and whether new categories or themes emerged. The semi-structured format of the interviews allowed pre-written questions to be answered, but also allowed the conversation to flow naturally with further questions based on the answers given (Boyce & Neale, 2006). The questions of the interview can be found in Appendix C.1.

SQ2. *Which organisational aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?*

Having established the boundaries of the problem frame and gained insight into the societal prism, a diverse cohort of employees from Dutch energy organisations will be engaged to elicit their perceptions of gender inequality. This engagement will be facilitated by a survey targeting employees representing a wide range of organisations, job titles, levels of seniority and gender identities. This inclusive approach ensures that a comprehensive understanding of the various aspects contributing to gender inequality is gained, encompassing a variety of perspectives that might otherwise be overlooked. By analysing the survey data, the study will further elucidate the complex interplay of individual, organisational and societal aspects and personal factors that underpin the persistence of gender inequality

in the context of Dutch energy organisations.

Identification of the survey respondents

The respondents for the survey were selected based on being an employee in a Dutch energy organisation.

Respondents of the survey

The survey was distributed electronically via the LinkedIn platform and mailing list of 75inQ, reaching out to their extensive network of members. Additionally, it was personally shared by Marielle Feenstra and Anouk Creusen, directors of 75inQ, who have respectively over 500 connections and over 2000 followers. The survey was also shared on the Amsterdam Smart City platform and within the companies of several members of the 75inQ community. 74 respondents answered the survey.

Table 5. Demographic information of the survey respondents

	Count
Total number of survey respondents	74
Gender	
Women	57
Men	17
Nonbinary	0
Type of organisation	
Large corporation	28
Small to medium-sized business	18
Start-up	4
Non-profit organisation	7
Government organisation	11
Self-employed/entrepreneur	6
Job title	
Executive	10
Senior Manager	11
Middle Manager	9
Entry-level Employee	4
Specialist	25
Human Resources or Talent Acquisition	2
Administrative or Support Staff	1
Trainee	1
Other	11
Seniority	
<1 year	5
1-5 years	13
5-10 years	19
10-20 years	21
20-30 years	14
>30 years	2

The demographic information of the respondents for the survey on explanations of gender inequality in the Dutch energy sector is presented in Table 5. The table includes the gender, type of organisation, job title and seniority of each respondent. There was a total of 74 respondents, with 57 of them being female and 17 of them male. The organisations represented included a range of types, with the job titles ranging from manager to analyst and seniority ranging from entry-level to executive. This data was useful in understanding the background of the respondents and the actuality of gender inequality in the Dutch energy sector.

Limitations participation bias

Potential bias could arise due to the shared interests and knowledge of most participants. A large portion of the respondents come from the 75inQ community which a vibrant community of over 500 and a LinkedIn platform of over 1300 women actively involved in the Dutch energy sector that are interested in gender and energy.

Survey format

The survey used statements and a Likert scale to measure agreement or disagreement with the statements, and to gain an understanding of the reasoning behind the responses. The questions of the survey can be found in Appendix D.

SQ3. Which individualistic aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?

Following the survey, the focus of the research will shift to an in-depth exploration of attitudes at the individual level. To achieve this, six interviews will be conducted with employees representing different organisations, levels of seniority, job titles and gender identities. This targeted interview approach will facilitate a deeper understanding of the nuances and complexities underlying individual attitudes, while providing an opportunity to contextualise and expand on the survey findings. Ultimately, these interviews will contribute valuable insights to the research and further illuminate

Table 6. Interviewed employees with their gender, seniority, type of organisation and job position

Interviewees	Gender	Seniority	Type of organisation	Job position
Interviewee 1	Female	1-5 years	Large corporation	Specialist
Interviewee 2	Male	10-20 years	Large corporation	Middle Manager
Interviewee 3	Female	20-30 years	Large corporation	Senior Manager
Interviewee 4	Male	20-30 years	Small to medium-sized business	Senior Manager
Interviewee 5	Female	10-20 years	Large corporation	Account manager
Interviewee 6	Male	5-10 years	Large corporation	Human Resources (HR)

the multifaceted nature of gender inequality in the context of Dutch energy organisations.

Identification of the interviewees

These interviewees will be sourced from the survey where the final question asks if employees would be willing to participate in an interview to discuss their perspectives on gender inequality within their respective organisations. Maximum variation of gender, seniority and job position were utilized to select the interviewees.

Interviewed employees

In sum, seven employees were initially contacted for interview participation, with six ultimately providing responses, resulting in six conducted interviews. A beneficial strategy was found to involve scheduling the interviews in the interviewees' calendars with the provision for rescheduling, if necessary. This approach was implemented subsequent to attempting to arrange interview dates via email correspondence. The background information pertaining to the interviewees is presented in Table 6.

Interview format

The interviews consisted of open-ended questions asked in a semi-structured manner. The semi-structured format of the interviews allowed pre-written questions to be answered, but also allowed the conversation to flow naturally with further questions based on the answers given (Boyce & Neale, 2006). The questions of the interview can be found in Appendix E.1.

3.2.6 ANSWERING THE MAIN QUESTION

How do perceptions of gender inequality among employees in Dutch energy organisations emerge from the interplay of societal, organisational, and individualistic aspects, as well as personal factors?

The triangulation of literature, events, conversations, interviews, and survey data allows for a comprehensive analysis, culminating in the development of a novel framework on perceptions of gender inequality. The research design allows for the identification and examination of emergent patterns and themes within the collected data, resulting in a unique framework that illuminates the complex aspects and personal factors and their interrelationships in relation to gender inequality. By integrating the findings from each methodological component, the study will achieve a more holistic understanding of the wicked problem, ultimately contributing to the development of an innovative, integrative framework that addresses the main research question.

	Objectives	Methods	Question	Outcome
Chapter 1 Introduction	Background + Research Focus	Desk research		Introducing the case
Chapter 2 Literature Review	Knowledge gap + Research Question	Scoping literature review		Map of literature structure
Chapter 3 Research Approach and Methodology	Research Approach + Methods	Desk research		Flow of iteration and transdisciplinary case approach
Chapter 4 Thematic Review	Literature on problem framing and gender inequality	Thematic literature review		Analysis of research gender inequality perceptions and personal factor
Chapter 5 Examining the Societal Prism	Identify emerging aspects and theme societal prism	Conversations Events Survey In-depth interviews	SQ1	Analysis of interplay aspects and personal factors established from all methods
Chapter 6 Examining the Organisational Prism	Identify emerging aspects and theme organisational prism	Conversations Events Survey In-depth interviews	SQ2	Analysis of interplay aspects and personal factors established from all methods
Chapter 7 Examining the Individualistic Prism	Identify emerging aspects and theme individualistic prism	Conversations Events Survey In-depth interviews	SQ3	Analysis of interplay aspects and personal factors established from all methods
Chapter 8 Discussion	Discussion and reflection on research			
Chapter 9 Conclusion	Answer main research question			

Figure 6. Chapter structure outlining objectives, methods, questions, and outcomes

4. Thematic Review: Problem Framing and Gender Inequality

A thematic review of the literature on problem framing in relation to gender inequality in organisations demonstrates the complexity of the issue and the different ways in which environment, knowledge and experience can shape perceptions of gender inequality. As discussed in Chapter 2 Literature Review, perceptions can be categorised into three prisms: societal, organisational, and individualistic. While none of these prisms are inherently false, they play a significant role in determining the types of interventions an individual is likely to create and support (Benschop & Verloo, 2006; Cech & Blair-Loy, 2010; Wynn, 2020). In line with the first step of the conceptual framework of problem framing as can be seen in Figure 7, mental representations of gender inequality are shaped by three key personal factors: environment, knowledge, and experience (Pearce & Ejderyan, 2020). The aim of this thematic review is to illustrate the different ways in which environment, knowledge and experience can shape people’s mental representation and thereby perception of gender inequality according to research.

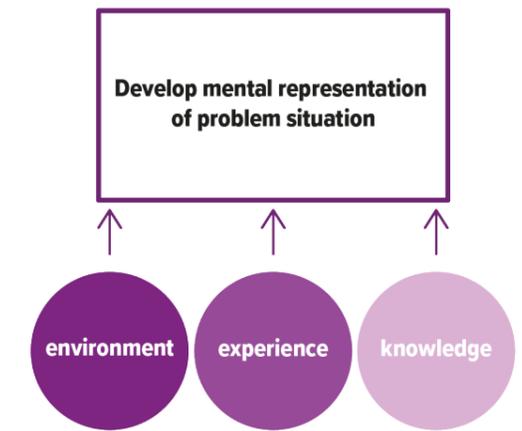


Figure 7. The first step of problem framing adapted from the conceptual framework of Pearce and Ejderyan (2020)

4.1 SEARCH DESCRIPTION

The literature review methodology presented in *Doing Your Literature Review - Traditional And Systematic Techniques* (Jesson et al., 2011) was used as a guideline for conducting the search and selection of literature. The method described in this book aids the review process by providing guidelines for sourcing, selecting, and evaluating academic literature. This makes it easier to identify relevant studies and assess their quality.

The papers in this review were sourced from Scopus in March 2023. Using a Boolean operator, only those papers containing the keywords TITLE-ABS-KEY ((“explanations for gender inequality” OR “explanations of gender inequality” OR “ideologies about inequality” OR “ideologies about gender inequality” OR “explaining gender inequality” OR “understanding of gender inequality” OR “beliefs about gender inequality”).

Overall, the selection process for papers to be included in the review involved several steps. The initial search was built around the keywords, which yielded 39 papers. After screening the results by assessing their relevance in answering the research questions posed earlier a total of 6 papers remained, as listed in Table 7. The primary reasons for omission were off-topic subjects and unsuitable content (e.g., not focused on personal problem framing or gender inequality).

Table 7. Selected papers for thematic review on assessing problem framing and gender inequality

Author(s)	Group Characteristics	Personal Factor	Research Method
O'Brian and Wegren	Residents of rural Russia	Cultural environment	Quantitative
Heijstra, O'Connor and Rafnsdóttir	Academics of Icelandic universities	National environment	Quantitative
Cech and Blair-Loy	Successful women professionals in STEM	Career and family environment	Quantitative
Carian and Johnson	Students in equality course	Course knowledge	Qualitative
Wynn	Silicon Valley executives	Power experience	Qualitative
Wharton and Estevez	Department chairs at public university	Male experience	Qualitative

4.2 EXPLORING PERSONAL FACTORS

This sub-section explores the personal factors influencing perceptions of gender inequality by examining the studies classified according to environment, knowledge, and experience. A thematic analysis of the selected papers is carried out in order to identify patterns and connections that provide insights into how these factors shape and contribute to the understanding of gender inequality in different contexts.

4.2.1 THE IMPACT OF ENVIRONMENT ON GENDER INEQUALITY PERCEPTIONS

O'Brien & Wegren's (2015) study sheds light on the environmental influences on perceptions of gender inequality, specifically examining the cultural factors that hinder women's progress in the workplace in rural Russia. In this context, gender inequality in economic power and income is produced by a complex interplay of factors, including political power relations, as well as culturally and socially transmitted attitudes about gender roles (Wegren et al., 2010). The unique post-Soviet rural environment in Russia allows for an exploration of how cultural traditions and structural changes in the rural economy and political institutions affect gender inequality. The study suggests that barriers to women's leadership come primarily from deeply rooted cultural attitudes about gender and the division of labour. These attitudes, which originate in the household and are shared by both spouses, contribute significantly to perpetuating gender inequality in the workplace, particularly in the post-Soviet environment where farm managers are elected.

The study by Heijstra et al. (2013) explores the environmental influences on gender inequality in Icelandic universities. It is worth noting that the environments of rural Russia and Icelandic universities are very different, which may lead to different influences on perceptions of gender inequality. Rural Russia is characterised by its post-Soviet context, complex economic and political power relations and deeply rooted cultural attitudes about gender roles. Iceland, on the other hand, is a Nordic country with a distinct socio-cultural context, often associated with progressive gender policies and the highest rate of gender equality since 2009 (World Economic Forum, 2022). These contrasting environments can provide valuable insights into the different ways in which environmental factors shape perceptions of gender inequality in different cultural and geographical settings.

Iceland's 'defamilization policies' encourage women to balance family and career, reducing the need to prioritise as suggested by Ceci and Williams (2011) and Hakim (2003) for women in the UK and US. Despite these policies, the study by Heijstra et al. (2013) found that a significant proportion of Icelandic academics still perceive family responsibilities as a cause of gender inequality. The study also found that women were more likely than men to attribute the underrepresentation of women in professorial positions to a male-dominated environment, suggesting systemic barriers in Icelandic academia. In contrast, men were more likely to support the pipeline explanation, believing that increasing numbers of female graduates would eventually correct the gender imbalance in professorial positions. This perspective suggests that the impact of the Icelandic national context on perceptions of gender inequality is significantly less than that of the gendered academic organisational context, implying that the academic environment lags behind in terms of gender equality. Furthermore, this study highlights the role of habitus in shaping perceptions of gender inequality among women in different levels of academic positions. Habitus, as conceptualised by Bourdieu, refers to the system of dispositions, or internalized tendencies, that individuals acquire through their social experiences, upbringing, and cultural environment.

Finally, the study by Cech and Blair-Loy (2010) examines the impact of work and family environment on perceptions of gender inequality, specifically how women in science, technology and related fields interpret the under-representation of women at senior levels. It has been observed that married women, those with a business education and those at the top of their organisations tend to adopt meritocratic explanations. Conversely, mothers, primary breadwinners, professional service providers and those working in unsupportive organisations are more likely to consider structural explanations. Among high-ranking women in science and related fields, structural explanations appear to be used primarily when individuals encounter everyday situations specific to the particular type of inequality that challenge the legitimacy of meritocratic explanations. In the absence of such specific experiences, meritocratic explanations appear to be the dominant interpretation of inequality.

Cech & Blair-Loy's (2010) research shows that the immediate environment influences perceptions of gender inequality. For example, they show that the impact of marriage on perceptions of inequality depends on specific circumstances within marriages. Married women who serve as primary breadwinners find structural explanations more persuasive than motivational explanations, possibly because of their departure from traditional marriages and concerns about

the financial support of their families.

4.2.2 THE ROLE OF KNOWLEDGE IN SHAPING GENDER INEQUALITY PERCEPTIONS

The study by Carian and Johnson (2022) investigates the effect of knowledge on perceptions of gender inequality. It focuses on students who volunteered to take part in a ten-week sociology course on the gender gap in leadership in politics and business. Although young people are often perceived as advocates of gender progressivism (Risman, 2018), their gender beliefs do not necessarily translate into significant social change. Young people continue to encounter long-standing gendered structural constraints, and their personal beliefs are influenced by broader cultural factors (Gerson, 2010; Pedulla & Thébaud, 2015).

Carian and Johnson (2022) found that despite the structural explanations presented in course materials and lectures, young people tended to prioritise individual explanations and solutions to gender inequality. While the young participants may have understood the structural perspective in theory, simply being aware of the aspects was not enough for them to prioritise structural solutions. The tendency to look through the individualistic prism may be influenced by the agency myth, a deeply ingrained cultural notion that suggests that individuals, particularly women, have control over their personal outcomes and should overcome structural barriers. The findings suggest that the agency myth provides a sense of self-efficacy and control, but at the same time prevents young people from prioritising structural explanations for inequality and developing solutions to address it. The data suggest that young people were only able to challenge the agency myth after experiencing critical junctures or personal events that acted as powerful interventions and changed their belief in the agency myth. This is in line with the findings of Cech and Blair-Loy (2010).

4.2.3 HOW EXPERIENCE SHAPES GENDER INEQUALITY PERCEPTIONS

Wynn's (2020) research demonstrates the impact of experiences of power on perceptions of gender inequality. The study focuses on examining the explanations for gender inequality provided by Silicon Valley executives. It finds that executives tend to favour individualistic and societal explanations for gender differences and inequality. These explanations are correlated with efforts primarily aimed at changing individuals or influencing external communities. Rarely do leaders engage in efforts to bring about structural change within the organisation. Although leaders reported instances where they witnessed organisational inequalities, they consistently failed to identify the organisation as the primary entity responsible for causing or correcting these inequalities. Instead, they attributed inequality to the biases of individuals, which leaders sought to mitigate by changing the individuals themselves.

One possible explanation for CEOs not perceiving gender inequality as organisational could be their position of power within the organisation. Individuals in positions of power often have a more positive view of the organisation as they benefit from the existing structure and hierarchy (Jost & van der Toorn, 2012). This may lead to a reluctance to acknowledge systemic issues, as this would imply that the organisation may not be functioning optimally or fairly.

Wharton and Estevez (2014) investigated the impact of power on a particular group, specifically academic department chairs at American public universities, and their beliefs about gender and gender inequality within their departments. The findings revealed that the perspectives of these chairs were shaped by factors such as individual responsibility and choice, an antiquated view of work as separate from family life, and the perception of gender as an individual characteristic rather than an inherent aspect of academic work and progress.

Moreover, the study found that department chairs generally do not address gender issues beyond the context of family issues. Research with female faculty members indicates that while departmental attention to caring responsibilities is crucial, they are primarily concerned with day-to-day aspects of the work environment, including exclusion from formal and informal networks, fairness and gender equity, workload, and other elements of departmental life. The overall findings suggest a disconnect between the efforts of heads of departments to address the needs of female faculty and the actual concerns of these faculty members themselves.

4.3 SYNTHESIS OF PERSONAL FACTORS

In summary, the exploration of personal factors in shaping perceptions of gender inequality reveals the roles of environment, knowledge, and experience. The analysis reveals that environmental factors, such as cultural traditions, political power relations, and structural changes, play a significant role in shaping gender inequality perceptions

(Heijstra et al., 2013; O'Brien & Wegren, 2015). Furthermore, knowledge of structural explanations does not necessarily lead to prioritizing these explanations or implementing structural interventions (Carian & Johnson, 2022). Experience does shape perception, as demonstrated by the different perspectives held by individuals in positions of power (Wharton & Estevez, 2014; Wynn, 2020).

In conclusion, the majority of the studies analysed confirm that the individualistic prism is the most dominant when it comes to explaining gender inequality. Personal encounters, habitus, and critical junctures, which can be seen as intertwined factors, emerge as the most influential factors shaping the perception of gender inequality as structural rather than individual. Despite the differences in environments, knowledge, and experience in the studies, the individualistic prism prevails, suggesting that a deeper understanding of the complex interplay between aspects within the prisms and personal factors is crucial to address the persistent issue of gender inequality effectively.

4.4 SETTING THE SCENE

In the previous chapters, the boundaries of the prisms have been delineated through the first literature review, and the foundation of personal factors shaping perceptions of gender inequality has been identified in the second literature review. Metaphorically, we have explored how various personal factors, including environment, experience, and knowledge, guide the usage of a prism through which homogenous groups perceive gender inequality. In considering these results, my interpretation suggests that further investigation outside the thought-collective and into the individual is necessary to attain a nuanced understanding of the formation of perceptions and to develop an innovative framework. The following chapters will provide a basis for delving deeper into aspects within the prisms and their interconnections with personal factors.

5. Examining the Societal Prism

The primary focus of this chapter resides in addressing the sub research question: “Which societal aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?”. By systematically analysing the information derived from events, conversations with researchers, expert interviews, the survey, and employee interviews, various aspects are uncovered that contribute to an overarching theme of gender inequality within Dutch energy organisations. The data collated through these distinct methods underwent rigorous content analysis, facilitating the identification of a recognized theme accompanied by diverse aspects. Detailed summaries of the conducted interviews are provided in Appendix C.2 and E.2. The ensuing sub-sections will delineate the recognized theme and aspects, subsequently followed by the assembly of the prism.

5.1 SOCIETAL ASPECTS

The aspects examined in this sub-section are integral parts of what is known as the societal prism. The societal prism in this context refers to the range of societal aspects that critically shape perceptions of gender inequality. These aspects, comprising a wide range of societal norms, expectations, and structures, are not discrete elements but rather interrelated facets of a larger, more complex system. Together, they shape the way some individuals perceive and understand gender inequality. By carefully examining these aspects and their interactions with personal factors, the contours of the societal prism can be effectively mapped, facilitating a more holistic understanding of societal influences on perceptions of gender inequality.

The central theme of the societal prism emphasises the role that long-standing societal customs and expectations play in shaping gender inequality within Dutch energy organisations. The aspects shaping gender inequality in the societal prism encompass Gender-based Assumptions, Historical Influences, Power Imbalance and National Cultural Influence. These aspects share a commonality in that they identify the ways in which historical patterns and deeply rooted societal norms continue to influence both the workplace environment and employees’ attitudes towards gender inequality. For instance, gender-based assumptions such as stereotypes and expectations, for example the belief that women are not as capable or interested in technical roles, create barriers for women in the workplace. Historical influences, including generational differences, traditional roles and influence from childhood, serve to further reinforce gender inequality. Power imbalances within organisations and society privilege male voices and reinforce male-dominated leadership under the argument that women are simply not available, while national cultural influences, like the Dutch behaviour and part-time work culture, limit women’s opportunities to advance in their careers. The theme is called “Precedent Breeds Culture: The Societal Roots of Organisational Norms”. Figure 8 shows the main categories and examples that fall under the main theme. Table 8 presents the illustrative quotes belonging to these categories from the experts and employees.

5.1.1 GENDER-BASED ASSUMPTIONS

During the interviews and in the survey, the assumptions based on gender created by society came forward as a main cause of gender inequality. In the interviews conducted, expert 2 alluded to the formation of an ‘artificial shell’ of traits. This term refers to the prescribed adherence to cultural conventions and societal norms, whereby individuals may embody or project characteristics that do not necessarily reflect their authentic selves, but rather are expected or deemed acceptable within their cultural or societal context. For example, that women shouldn’t be ambitious or negotiate. When a person steps outside of this ‘shell’, negative feedback is experienced. This is causing inequality in organisations, because:

Expert 4: *“The traits required to be successful in business are attributes that are negatively interpreted when exhibited by women.”*

Expert 3 linked this to tall poppy syndrome, which refers to the tendency to criticize or undermine those who stand out due to their success, abilities, or achievements. In the context of gender inequality, this syndrome may particularly affect women who break the mould and display qualities traditionally associated with success in the business world.

According to employees 1, 3 and 5, technical qualifications are not expected of women. Because of this, women in technical roles need to prove themselves more:

Employee 5: *“When a male colleague tells something to a client or even within the company, he is simply believed based on his words. Whereas, I [as a woman] feel that I have to prove myself more with sources and documents.”*

In my analysis of these findings, I interpret these assumptions could be based on historical influences, where women



Figure 8. Depiction of the Societal Prism: Key Aspects and Sub-Aspects Encircling the Central Theme

have traditionally been the caretakers of family. Over time, this has led to stereotypes and biases that assume women are less capable or interested in technical roles.

5.1.2 HISTORICAL INFLUENCES

Historical influences are expressed by interviewees and respondents in generational differences, traditional roles, and childhood. When interviewees talked about generational differences, the older generation was used for senior people in organisations and younger generation for people starting to enter the workforce. According to experts 1, 2, 3 and 4, generational differences contribute to the continuation of traditional roles and expectations, further perpetuating gender inequality in organisations. According to Miles (1984), the perpetuation of these roles and the expectations placed upon women, such as being subservient or assuming caregiving responsibilities, can be traced back to the historical treatment of women. For example, by religious texts that were used to reinforce gender roles. Multiple employees (1 and 5) state that traditional roles of men working and women caring for children have perpetuated gender inequality in the workplace. Some of these traditional roles persist, as highlighted by:

Employee 1: “Especially the older generations, they can still expect that secretary-like behaviour from you [as a woman].”

Multiple experts (2, 3 and 4) mentioned that young women and men have different values than older generations. This also influences what talent a company is looking for, causing an external pressure to incorporate equality in company values:

Expert 3: “If you don’t recognize yourself in the values and norms of the company, the Randstad Monitor has shown that 41% of people no longer want to work for you.”

Survey respondents noted that societal expectations and gender roles are often enforced from a young age through education. Experts 1 and 2 on the other hand also mention the influence in childhood but point to parenting. Namely, that the older generation was used to traditional roles that teach them to their children. Because of this, it could take time to change gender inequality:

Expert 1: “The equality between men and women is not yet fully realized, and that’s partly because it spans generations. Not so long ago, women were really treated as second-class citizens.”

In my analysis of these findings, I interpret that these historical influences can create imbalanced representation, where women have traditionally been underrepresented in technical and leadership roles.

5.1.3 POWER IMBALANCE

Patriarchal structures and power dynamics within society and organisations perpetuate gender inequality by privileging male voices and reinforcing male-dominated leadership (Walby, 1989). Employees (1, 3 and 5) and all experts acknowledged that these dynamics can be challenging to dismantle, as they are deeply ingrained in the fabric of the workplace culture:

Employee 1: “There was a kind of undercurrent that the world is simply not made for women. And that is the feeling that sometimes creeps up on me here [in the organisation] as well.”

The disparate allocation of power, as evidenced by representation, was acknowledged by numerous survey respondents in the study. Power dynamics shape and influence access to resources, decision-making, and opportunities within a given context (Ely et al., 2011). Disparities in power can lead to certain groups being underrepresented, as these groups may experience barriers to participation or lack the necessary influence to promote their interests effectively (Ridgeway, 2011). The lack of women in technical or leadership roles is mentioned by all interviewed men (employees 2, 4, 6) in relation to the lack of women in STEM education, also known as the ‘pipeline argument’. Imbalanced representation is most often mentioned by the interviewed female employees (employees 1,3 and 5) in relation to leadership roles, meaning that there are fewer women at higher levels, leading to a lack of role models. In my analysis of these findings, I interpret this could be explained by the fact the women themselves have been in STEM studies and entered the technical workforce and are personally experiencing struggles on their way to the top.

In the light of these findings, my interpretation infers that power imbalance within organisations can be linked to the

national context in which these organisations operate. In countries like the Netherlands, where part-time culture and societal norms have historically influenced gender roles, the resulting imbalance in power may be more pronounced.

5.1.4 NATIONAL CULTURAL INFLUENCE

Finally, organisational culture is seen through most interviews (expert 1, 2, 3, 5 and employee 1,3,5 and 6) as one of the main causes of gender inequality, further explained in Chapter 6. When asked about the roots of organisational culture, employees (2,3 and 4) of big corporates mentioned culture depends on the country. Different countries and cultures have varying levels of gender bias. One employee describes Dutch culture as:

Employee 4: *"[The culture] can be quite direct in a way that is not necessarily pleasant for everyone. And it may sound like we have a very heavy culture, which is not the case, but it is indeed a straightforward culture where things are simply said, which is somewhat typically Dutch."*

Also, the influence of the perseverant Dutch part-time work culture is mentioned, where women are more likely to work part-time and therefore less to climb the corporate ladder in the current way of working:

Expert 3: *"It [gender inequality] goes really deep into the society, especially in the Netherlands with its cultural environment where women either don't work or work part-time."*

Table 8. Main societal aspects found in the data supported by illustrative quotes

Main aspects	Illustrative quote
Gender-based assumptions	Expert 2: <i>"Both genders got really reduced back to some artificial shell of what it's supposed to be female, or what's supposed to be male."</i>
	Survey Respondent: <i>"Women are supposed to be nurturing, emotional, caring, precise, organized, good at multitasking, talk too much. Men are do-ers, to the point, better in technical/mathematic jobs, hard-working, more fun. These perceptions are already enforced at university."</i>
	Employee 5: <i>"I still notice that it's very much focused on men and technology, with little awareness that women can also easily understand technology."</i>
Historical Influences	Expert 2: <i>"Some people will still be idiots because they were grown up in that way, not because they are idiots, but because they [older generation] were shaped by the culture that rewarded that."</i>
	Survey Respondent: <i>"In basis a lot of our thinking is formed in early days (education, schooling, society)."</i>
	Employee 1: <i>"I think that we are, by tradition, a technical company where mainly men have worked since the beginning. [] So, we can see that men generally participate more frequently in this field. As a result, a predominantly male culture naturally develops."</i>
Imbalanced Representation	Expert 5: <i>"those [energy] organisations were male dominated, I mean crazy male dominated, until the last 40 years the introduction of more women in different fields and functions"</i>
	Survey Respondent: <i>"Bias is caused by what is common in society."</i>
	Employee 4: <i>"If you look at the university, the number [of women] there is also not very high, relatively speaking"</i>
National Cultural Influence	Expert 3: <i>"The cultural environment, of course, where women either don't work or work part-time."</i>
	Survey Respondent: <i>"Women are still primary caretakers in Holland"</i> Survey Respondent: <i>"In my experience [the cause of gender inequality] is a mix of personal/social and cultural environment and can vary from country to country"</i>
	Employee 2: <i>"I think [the culture] varies more by country than by company, but of course, [a company that has] its headquarters in the Netherlands for a long time, which gives it a Dutch touch. If you look at [companies in other countries] you'll quickly find [their national] culture"</i>

5.2 ANALYSING ASPECTS TO ASSEMBLE PRISM

This analysis connects the identified aspects—Gender-based Assumptions, Historical Influences, Power Imbalance, and National Cultural Influence—to provide a comprehensive understanding of the societal prism through which one can perceive gender inequality. The theme that connects these aspects is 'Precedent Breeds Culture: The Societal Roots of Organisational Norms'.

Upon examining these findings, my interpretation is the societal aspects are all based on a precedent which seem to have deep historical roots. The survey results revealed that organisational culture emerged as the most frequently mentioned topic when respondents were asked about the causes of gender inequality. To further explore the foundation of organisational culture, interviews with employees were conducted, explicitly inquiring about their opinions on the aspects that contribute to the formation of organisational culture within their organisations. From the analysis of these findings, my reading is that in the employees' view, precedent breeds culture. Whether the underlying causes are rooted in historical contexts or related to national context, the presence of gender-based assumptions or the exclusion of a particular gender from certain workplaces or positions suggests that the foundation for addressing future gender equality may be inherently flawed.

The societal roots of organisational norms can be traced back to precedents set by historical contexts, as explored by Caroline Criado-Perez in her book "Invisible Women: Data Bias in a World Designed for Men" (Criado-Perez, 2019). Perez's work highlights the persistent invisibility of women in data and decision-making processes, which has significant consequences for gender equality in various aspects of life, including the workplace.

Upon examining the findings, my interpretation is the societal prism corresponds to the nurture perspective in the nature versus nurture debate, that posits that human behaviour, traits and characteristics are primarily influenced by environmental factors rather than genetic predispositions. It is important to recognise that these environmental influences can come from a variety of sources, including society at large and organisational contexts. Some survey respondents emphasise the interconnectedness of organisations and society, noting that "organisations are small societies and follow the same rules". This statement led me to interpret that the processes and structures within organisations are a reflection of wider societal patterns, which in turn help to shape individual behaviour and attitudes.

When comparing the experts to employees, it is notable that the employees (1,2,3,4 and 5) place a big emphasis on the involvement of society on gender inequality. Even making explicit how big society's hand is in inequality:

Employee 2: *"Ultimately, the culture within a company accounts for maybe 20%, while 80% or more is derived from the culture of the country and society."*

One employee shared an experience of talking to her male supervisor about her ambitions, and upon expressing her desire to advance to a higher level, she was asked about her plans for having children. She explicitly denied personal involvement of the supervisor and pointed a finger to society after the encounter:

Employee 1: *"I think it's more a sign of a culture or a certain appreciation we attach to specific roles in society, rather than someone genuinely trying to discourage me from pursuing something."*

Synthesising the findings, it can be concluded that the societal prism reflecting gender inequality within Dutch energy organisations is underpinned by the central theme of long-standing societal customs and expectations. Four key aspects, namely gender-based assumptions, historical influences, power imbalances and national cultural influences, have been identified as integral aspects of this societal prism. Taken together, these aspects demonstrate how entrenched societal norms and historical patterns continue to shape workplace environments and attitudes towards gender equality. For example, barriers to women in the workplace are created by gender-based assumptions, such as the stereotype that women lack the ability or interest in technical roles. Historical influences, including generational differences, traditional roles and childhood influences, further reinforce gender inequality. In addition, the societal prism is characterised by power imbalances within organisations and society that favour male voices and perpetuate male-dominated leadership. This is rationalised in interviews with employees by male claims that qualified women are simply not available. National cultural influences, such as the corporate culture of large Dutch companies and the prevalent culture of part-time work, further limit women's opportunities for career advancement.

6. Examining the Organisational Prism

The primary focus of this chapter resides in addressing the sub research question: “Which organisational aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?” By systematically analysing the information derived from events, conversations with researchers, expert interviews, the survey, and employee interviews, various aspects are uncovered that contribute to an overarching theme of gender inequality within Dutch energy organisations. The data collated through these distinct methods underwent rigorous content analysis, facilitating the identification of a recognized theme accompanied by diverse aspects. Detailed summaries of the conducted interviews are provided in Appendix C.2 and E.2. The ensuing sub-sections will delineate the recognized theme and aspects, subsequently followed by the assembly of the prism.

6.1 ORGANISATIONAL ASPECTS

The aspects examined in this sub-section are integral parts of what is known as the organisational prism. The organisational prism in this context refers to the range of organisational aspects that critically shape perceptions of gender inequality. These aspects, comprising a wide range of organisational strategies, cultures, policies, variations, and external catalysts, are not discrete elements but rather interrelated facets of a larger, more complex system. Together, they shape the way some individuals perceive and understand gender inequality. By carefully examining these aspects and their interactions with personal factors, the contours of the organisational prism can be effectively mapped, facilitating a more holistic understanding of organisational influences on perceptions of gender inequality.

Figure 9 illustrates the organisational prism, highlighting the complex interrelationships between structural facets and entrenched attitudes that shape perceptions of gender inequality within Dutch energy organisations. The organisational prism is formed by several key aspects, including Strategy, Organisational Culture, Policies and Variation, and External Catalysts. These aspects are united by their role in illustrating how personal attitudes often lag behind the systemic progress of an organisation. In particular, the strategy aspect embodies the stages of Diversity, Equity and Inclusion (DE&I) development alongside a profit-driven business model. The organisational culture aspect is shaped by shared mental models, leadership styles and the inherent structures within a predominantly male-dominated environment. Policies have been updated, with the notable exception of maternity and paternity leave, but there is often a discrepancy between the theoretical framework and practical implementation due to lagging attitudes. The variation aspect reflects how experiences of gender inequality can vary according to factors such as job roles, departments, and the size of the organisation. External catalysts, such as societal pressures for diversification and the ongoing energy transition, serve as additional dynamic influences on gender inequality within organisations. The theme is called ‘Systems Outpace Attitudes: The Stall of Organisational Advancement’. Table 9 presents the illustrative quotes belonging to these categories from the experts and employees.

6.1.1 STRATEGY

Experts 1, 2 and 5 noted that the adoption of a DE&I strategies by an organisation takes place in stages. In these stages, it starts with focusing on recruitment, and later on retention and promotion of minorities. There are side paths to these ‘stages’ and according to one expert, the current focus is on getting men on board to tackle gender inequality:

Expert 1: *“But there was also a moment when we said that men need to be included as well. We shouldn’t create camps of men versus women; instead, we need to work together for change.”*

Employee 2, echoed similar sentiments, highlighting the paradoxical nature of tackling gender inequality and the crucial role men play in facilitating this shift towards a more balanced workplace. Employee 6 mentioned that it’s not just women who experience inequality, but that men also face unique challenges in this context.

While the need for collaboration between men and women in addressing gender inequality was widely acknowledged, some interviewees (employee 3, 4 and expert 6) raised concerns about potential unintended consequences of quota. One employee expressed a more critical perspective on the drive to equalize the number of job positions between genders:

Employee 4: *“Perhaps sometimes there are fewer opportunities for men because there is a pressure to even out the inequality in the number of job positions, which results in men having less chance to advance.”*



Figure 9. Depiction of the Organisational Prism: Key Aspects and Sub-Aspects Encircling the Central Theme

In addition to concerns about the impact of quota on equal opportunities, expert 6 also discussed the challenges of striking a balance between the desire for a diverse candidate pool and the practical realities of running a business. For instance, one HR employee illustrated this challenge in the context of recruiting for leadership positions in technical teams:

Employee 6: “Look, when I’m looking for a team leader for a technical team, there just aren’t that many [women] available. So, at some point, I need someone to lead the group. We do our best to give more attention to women within the company who have ambitions, but sometimes, you just need someone.”

This statement led me to interpret that there is tension between the pursuit of diversity and the operational needs of organisations, which may sometimes conflict with each other. Different experts (4 and 5) highlighted that business models, often driven by profit, can act as a barrier to valuing and prioritizing diversity. One expert elaborated on this point:

Expert 5: “But in any case, there’s always this bouncer at the door in companies, particularly, and the bouncer at the door for every idea that’s going to chuck you out is the one that’s controlling for commercial viability.”

It is noteworthy that several interviewees (employee 2 and experts 2, 3, 4, 5) refer to the commercialization of gender balance, which is consistent with instrumentalism. Instrumentalism is the approach of undertaking an activity for a practical purpose or end goal, rather than for its own intrinsic value:

Employee 2: “The concept of “gender balance means business” emphasizes that a diverse mix is truly necessary.”

Nonetheless, this approach may jeopardize women’s autonomy and the pursuit of social justice. The notion of instrumentalism highlights the complex interplay between various organisational aspects, such as organisational culture, which also plays a significant role in influencing the issue of gender inequality.

6.1.2 ORGANISATIONAL CULTURE

The influence of organisational culture on gender inequality emerged as the most prominent subject in both the survey results and interviews. Often described as ‘male-dominated’, the fossil energy sector in general seems to be based on an old fundament of hierarchy and the culture is described as follows:

Employee 4: “I believe that the fossil fuel industry has a certain image that may not be working in our favor. This image can create a feeling among women, and some men as well, that they have to fight against it in order to succeed.”

According to expert 3, employees have a new desire to express their true selves within a company and be acknowledged for it. However, organisations are based on a one-size-fits-all approach. This approach, according to expert 4, stems from an organisational strategy, structure, and culture focused on maximizing cost savings and prioritizing what was considered prudent at the time. From the analysis of these findings, my reading is that as a result, the organisational culture suffers negative consequences, as it fails to accommodate and acknowledge the diverse individuality of its employees.

From different expert (1,2, 3 and 5) and employee (1,3,5 and 6) perspectives, culture appears to play a significant role in establishing norms for gender inequality within organisations. However, the concept of organisational culture lacks a universally accepted definition, to my reading leading to varied interpretations and understandings. The findings of the interviews lead me to interpret that a clear definition of organisational culture could provide a foundation for diagnosing and addressing gender inequality. Some distinctive views out of the interviews are given here:

- Organisational culture is shaped by the largest group sharing mental representations. According to expert 1 and 6 and employee 6, organisational culture is a collective construct influenced by the shared values and interests of the workforce, highlighting the cognitive aspect of culture.
- Organisational culture reflects leadership characteristics. Employees 1 and 3 emphasize the impact of decision-making on organisational culture, suggesting that the

composition of decision-makers could influence the overall cultural environment. This implies that changes in leadership may lead to significant cultural shifts based on their values and priorities.

- Organisational culture represents an underlying structure. Employee 5 views culture as a foundational system, arguing that conversations and workshops alone may not suffice to create cultural change.
- Organisational culture is characterized by behavioural patterns. Expert 3 highlights the importance of recurring behaviours and habits in defining organisational culture, focusing less on individuals' feelings, thoughts, or beliefs.

In the survey, one respondent supports the explanation of leadership above stating organisational culture is partially influenced by individuals, especially those in management roles. This perspective appears to align with the views of most survey respondents, as culture is the most mentioned aspect and 61 out of 74 respondents believe that company leadership holds the primary responsibility for addressing and resolving gender inequality within organisations.

Based on a careful evaluation of these findings, I propose a new definition for organisational culture: the contextual framework that shapes and informs the organisation's unique identity and operational dynamics.

Organisational cultures are not monolithic, as they encompass various job positions, departments, and policies that apply to diverse individuals.

6.1.3 POLICIES AND VARIATION

Literature often attributes gender inequality to unequal systems (Acker, 1992; Ely & Meyerson, 2000; Kalev et al., 2016). This literature leads me to interpret that if the system is defined as the organisation, policies and processes are the written fundamentals of it. However, experts (1,2,3,4 and 5) note that while organisations have updated their policies, people's attitudes lag. One example, as mentioned by expert 1, is the feedback matrix in evaluation conversations, where despite changes in masculine metrics on paper, the old mindset persists in practice. The general sentiment from the survey also suggests that processes and policies do not inherently advantage one gender over another, stating that this is 'an old-fashioned opinion'. One expert acknowledges this as the policy-implementation gap:

Expert 3: *“Even when there is positive intent, the implementation may not always be effective enough.”*

One exception to gender-neutral policies, as drawn out of the survey results, seems to be maternity and paternity leave. Even though experts (2,3,4 and 5) attribute it to society, employees in the survey emphasize the organisational role in perpetuating gender inequality when employees become parents:

Survey Respondent: *“The handling of and judgment regarding maternity and paternity leave for men and women serves as a good indicator of gender equality.”*

Furthermore, the experiences of gender inequality vary across different job positions and departments. The interviews with employees 2, 5 and 6 indicate that greater inequality exists within the operational departments and among individuals with lower educational levels. Male employees 2, 4 and 6 perceive the issue of gender inequality to be primarily rooted in hiring practices, citing the presence of women in top positions as evidence that the higher echelons of the organisation are performing well in terms of gender equity. Conversely, female employees 1, 3 and 5 express that women in top-level positions are frequently concentrated in specific roles, such as human resources or administration, rather than in operational capacities:

Employee 3: *“But it's in the numbers [of women] and the position that matters, what she does, and what is the atmosphere of influence. Ultimately, there are always departments that have more power than others.”*

In conclusion, this sub-section has demonstrated the various perspectives on culture, leadership, policies, and practices contribute to the intricate web of aspects influencing gender inequality within organisations. While from the analysis of these findings internal elements such as shared mental representations, decision-making, and policy implementation play significant roles, my reading is that it is important to acknowledge the impact of external influences as well.

6.1.4 EXTERNAL CATALYSTS

External catalysts, such as legal regulations and industry trends, interact with internal organisational dynamics to shape the experience of gender inequality for employees across different roles and departments. The Dutch “ingroeiquotum” law aims to achieve a more balanced gender distribution in top positions at large companies (SER, 2022). This regulation has two primary components: 1) requiring publicly listed companies to have at least one-third of their supervisory board (RvC) comprised of women and men, and 2) mandating large corporations to establish and execute ambitious gender diversity targets and action plans. According to Expert 3, this law will influence the behaviour of (large) energy organisations and the talent pool in regard to gender inequality:

Expert 3: *“At the end of the year, information [about diversity targets and plans] is made transparent, and as a company, you need to take this seriously and do your homework. You can't just ignore it because, otherwise, you'll become known to the talent pool as unfriendly to women”*

Another external aspect mentioned in the literature as influencing gender inequality is the ongoing energy transition (Clancy & Feenstra, 2019; Régner, 2022). All interviewed employees acknowledged its impact on their companies and shared varied perspectives on how the transition intersects with gender inequality. A few employees (1, 2 and 5) expressed optimism, stating that the energy transition presents an opportunity to reduce differences:

Table 9. Main organisational aspects found in the data supported by illustrative quotes

Main aspects	Illustrative quote
Strategy	Expert 4: <i>“However, that business model has never changed, and you can see that it goes hand in hand with a definition of success that is based on values we attribute to men - masculine values.”</i>
	Survey Respondent: <i>“inequality is intrinsically embedded in our goal-setting and strategy, which also cascades down to the work floor”</i>
	Employee 2: <i>“The concept of “gender balance means business” emphasizes that a diverse mix is truly necessary”</i>
Organisational culture	Expert 6: <i>“a company with a very strong culture in that sense. Of course, it has also been male-dominated. It has been technically male-dominated, with men from Delft playing a significant role.”</i>
	Survey Respondent: <i>“I believe that men often have an (unconscious) advantage (in the energy sector) due to the prevailing “male-dominated culture,” the strong male network, and the fact that people tend to favor those who resemble themselves.”</i>
	Employee 1: <i>“So, in my surroundings, I observe that male characteristics are valued more highly than female characteristics.”</i>
Policies and Practices	Expert 4: <i>“Ultimately, evaluations are always subjective, even if companies try to make their criteria as objective as possible, which is a good thing. Even when they attempt to broaden these criteria”</i>
	Survey Respondent: <i>“Gender inequality is not that organised that it is embedded in processes and procedures.”</i>
	Employee 5: <i>“It does vary depending on which colleagues you talk to. I notice that with colleagues who are less focused on operations and more on the organisation, specifically the processes, the issue seems to be less prevalent than with people working in operations.”</i>
External Catalysts	Expert 5: <i>“Big changes are happening. The energy transition, the healthcare transition, the transition towards what used to be called DEI, which is now sort of like inclusion and belonging [...] but even how you see inclusion is starting to change.”</i>
	Survey Respondent: <i>“Perhaps measures such as quotas are initially needed to initiate change and promote gender equality.”</i>
	Employee 2: <i>“the vision of the company itself has changed significantly over the past 10 years, shifting much more towards an image that better aligns with the goals for 2030 and 2050.”</i>

Employee 1: *“The energy transition presents a great opportunity to reduce differences because, indeed, a transition requires many different qualities that can be both masculine and feminine.”*

In contrast, another employee raised concerns about the growth of the implementation phase, mainly dominated by men with vocational education:

Employee 6: *“So, if [the implementation phase] grows significantly, the number of men will also increase, and the number of women will decrease. Thus, I believe that the inequality in numbers will likely grow rather than shrink due to the transition.”*

These concerns are also reflected in Dutch media headlines such as ‘Speed of energy transition in danger because of shortage of technical employees’ (NOS, 2021), emphasizing the growth of the operational sector where significant gender discrepancies exist.

6.2 ANALYSING ASPECTS TO ASSEMBLE PRISM

This analysis connects the identified aspects- Strategy, Organisational Culture, Policies and Variation, and External Catalysts - to provide a comprehensive understanding of the organisational prism through which one can perceive gender inequality. The theme that connects these aspects is ‘Systems Outpace Attitudes: The Stall of Organisational Advancement’.

After scrutinizing the findings, I deduce that the biggest takeaway from the categories is that energy organisations in the Netherlands seem to be very focused on diversity and inclusion in their systems. A contrast seems to emerge when looking at the people involved. There is pressure on the external image to at least pay lip service to gender equality, but the culture and systemic actions seem to have a life of their own. The findings lead me to interpret that this might be the normal timeline of change, starting with the tangible and ending with the behavioural. Or it could be that there is no timeline, but that the implementation or even the design of the policies and processes is flawed. Working towards gender equality seems to come to a halt once the systems are examined.

In the survey, employees from large companies and small companies provided varied explanations regarding gender inequality in their workplaces. Employees in large companies mentioned that although some policies have improved, gender inequality persists. Some employees in the survey noted that women may have to work harder to be taken seriously and face obstacles when taking maternity leave or pursuing career opportunities. Employees of large companies in the survey emphasize the impact of company culture and policies:

Survey Respondent: *“I see this in the annual performance calibration where high potential women got lower scores than high potential men. [] And because women tend to be less demanding, giving them a lower score will be less painful for the manager, whereas a male high potential may object and make some noise.”*

On the other hand, small company employees in the survey also acknowledged the existence of gender inequality but didn’t necessarily attribute it to organisational processes or policies. They mentioned that cultural aspects and biases in hiring practices might contribute to inequality. In some cases, employees in the survey stated that they believed all genders had equal opportunities within their organisations. Small company employees focused on cultural aspects and hiring biases:

Survey Respondent: *“I think that it has more to do with culture and when hiring staff, people tend to hire what they know and avoid hiring staff whom are different to them in terms of gender and culture as it will be harder to bond with them in their opinion”*

Employee 4, who has worked in both large and small companies, acknowledges these differences, explaining that in a small company everyone knows each other, which leads to shorter lines of communication and faster decision-making. But bringing someone who is different to you into a smaller team can be seen as a higher risk. In contrast, larger companies tend to have bureaucratic structures with longer lines of communication and slower decision-making processes, making the organisation somewhat opaque and distancing employees from the company. This can lead to an overly standardised, sometimes masculine processes.

From my analysis of the category policies and variations, it appears that the maternity and paternity rules can be an

indicator of inequality. Employee 2 nuanced this in an interview by distinguishing between large and small companies. According to him, proper communication and planning are crucial, especially in larger companies where it should not be a problem to accommodate parental leave. However, employee 2 recognises that this may be more challenging for smaller and medium-sized energy companies, where the absence of a single employee can have a greater impact on the workforce.

In conclusion, the organisational prism is assembled through a conjunction of key aspects, including strategy, organisational culture, policies and variations, and external catalysts. Together, these aspects describe the mismatch between evolving systemic structures and stagnating personal attitudes within an organisation. In particular, the strategy aspect encapsulates the stages of DE&I development and a largely profit-driven business model. The organisational culture aspect is shaped by shared mental representations, leadership styles and inherent structures within a predominantly male-dominated environment. While most policies have been modernised, with the exception of maternity and paternity leave, there is often a gap between theoretical frameworks and practical implementation due to lagging attitudes. Variations are evident in the different experiences of gender inequality across different job roles, departments and organisational sizes. This diversity of experience and understanding highlights the role of the interaction with the environment as a personal factor and the organisational prism, demonstrating that interpretations of and encounters with gender inequality are not uniform but are shaped by the specific context. External catalysts, such as societal pressures for diversification and the ongoing energy transition, add further dynamic influences on the perpetuation of gender inequality within organisations.

7. Examining the Individualistic Prism

The primary focus of this chapter resides in addressing the sub research question: “Which individualistic aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?” By systematically analysing the information derived from events, conversations with researchers, expert interviews, the survey, and employee interviews, various aspects are uncovered that contribute to an overarching theme of gender inequality within Dutch energy organisations. The data collated through these distinct methods underwent rigorous content analysis, facilitating the identification of a recognized theme accompanied by diverse aspects. Detailed summaries of the conducted interviews are provided in Appendix C.2 and E.2. The ensuing sub-sections will delineate the recognized theme and aspects, subsequently followed by the assembly of the prism.

7.1 INDIVIDUALISTIC ASPECTS

The aspects examined in this sub-section are integral parts of what is known as the individualistic prism. The individualistic prism in this context refers to the range of individualistic aspects that critically shape perceptions of gender inequality. These aspects, comprising a wide range of individual characteristics, attitudes, and experiences, are not discrete elements but rather interrelated facets of a larger, more complex system. Together, they shape the way some individuals perceive and understand gender inequality. By carefully examining these aspects and their interactions with personal factors, the contours of the individualistic prism can be effectively mapped, facilitating a more holistic understanding of individualistic influences on perceptions of gender inequality.

The central theme of the individualistic prism underlines the role of personal attributions in defining gender inequality in Dutch energy organisations. The aspects shaping gender inequality in the individualistic prism encompass Awareness, Resemblance, Individual Differences and Gender Characteristics. Together, these aspects suggest preconceptions about inherent differences between and associations with the genders. Awareness, for example, highlights the influence of an individual’s upbringing, education and past experiences on their unconscious biases and willingness to take action regarding gender inequality. Resemblance, on the other hand, brings to light the ‘similar-to-me’ effect and the influence of role models, demonstrating the role of identification and relatability. The aspect of individual differences recognises the importance of the opposite in recognising unique personal attributes and gender identity in promoting equitable treatment and perceptions. Finally, gender characteristics identifies the influence of assumptions about gender differences, derived from personal experience and evolving leadership paradigms that are more inclusive of traditionally feminine values. The theme is called ‘Challenging the Individual: The Persistent Interplay between Attitude and Familiarity’. Figure 10 shows the main categories and examples that fall under the main theme. Table 10 presents the illustrative quotes belonging to these categories from the experts and employees.

7.1.1 AWARENESS

Most of the interviewees (employees 1, 2, 3, 4 and 6 and all experts) note that perceptions of gender inequality within a company can vary greatly depending on who is asked, ranging from differences based on generation, gender, seniority, to educational background. This highlights the complexity and subjectivity of the issue. Upon examining these findings, my interpretation is that a critical aspect influencing these perceptions seems to be whether an individual is directly affected by the issue. If someone is not personally bothered by the issue, they may not feel the need to learn more about it or take any action to address it. This lack of personal investment can create a disconnect between those who experience gender inequality and those who do not, leading to differing perceptions and priorities:

Survey Respondent: *“I joined events for matters like accessibility and inclusivity week. These made me more aware of issues that I assumed were not as prevalent as they are. Of note is that these events were not overly popular, with a female majority joining.”*

According to the survey results, awareness appears to play a crucial role in shaping perceptions of gender inequality. In the survey, the word ‘aware’ is mentioned 35 times. Many survey respondents seem to agree that increasing awareness is the first step towards change, as it encourages individuals to reflect on their own biases and consider the implications of gender inequality in their professional environments. One survey respondent highlights the interplay of individual bias and systemic issues:

Survey Respondent: *“Individuals have gender-related biases, which can be both conscious and unconscious, and may influence their decisions, such as in hiring processes where people tend to choose someone who is similar to themselves. This makes it harder for women to break into leadership positions, which is an issue caused by individuals. At the same time, the system is not well designed for women, as leadership positions often have limited flexibility for parental leave or other accommodations, roles that women still often take on or want to take on.”*



Figure 10. Depiction of the Individualistic Prism: Key Aspects and Sub-Aspects Encircling the Central Theme

One survey respondent doubts if being aware is enough, because one cannot, by definition, be aware of unconscious bias. Experts 4 and 6 acknowledge this in that according to them, there already is a general awareness of gender inequality as an issue. However, understanding the root causes and recognizing biases remain challenging as awareness is not the same as action:

Expert 4: "If people even think about the cause of the problem, which doesn't happen very often, not even by those who could explain it and are in a position to make policy. If it's even discussed by them, they don't take the necessary steps."

This is called the 'attitude-behaviour gap' (Park & Lin, 2020) and my reading is that this gap could also partially explain why not even one in ten male/female couples with children in the Netherlands have equally divided work and care responsibilities, even though four in ten view this as an ideal arrangement (CBS, 2022c).

Reflecting on the interplay between action and awareness, it is my view that awareness, or lack thereof, stems from the individual's direct experience with gender inequality.

7.1.2 RESEMBLANCE

The phenomenon, known as 'similar-to-me effect', suggests that people feel more comfortable and are drawn to those who share similar backgrounds, experiences, or beliefs (Riordan, 2000). As a result, individuals often gravitate towards others who are like themselves. These commonalities can create a sense of familiarity and understanding, making it easier for individuals to relate to and communicate with one another. Employees 1, 3, 5 and 6 have mentioned the numerical advantage of men can reinforce man's existing perceptions and biases. This creates a self-sustaining system:

Survey Respondent: "People like to be surrounded by people they know, and if it is a male-dominated culture, masculine ways of working will be the norm."

In the light of these findings, my interpretation infers that the "similar-to-me effect" may result in an unequal gender balance and a lack of diverse ideas, which becomes noticeable in higher management levels according to employees 1 and 3. Female employees 1 and 3 and experts 1 and 3 in the interviews point out that role models can contribute to improved career prospects and influence the behaviour of other employees. However, it is challenging when there are no role models that match one's own profile:

Employee 1: "What affects my career prospects is the idea that the existing management selects people who resemble themselves, and I don't see anyone in the management who looks like me."

In discussing the presence of women in leadership positions and their potential as role models, two interviewees shared differing perspectives:

Expert 1: "In the board of directors, we have only one woman out of four, which is only 25%. However, in the management level below, one-third of the members are women, so that helps. In that sense, we have enough role models."

Employee 3: "But do I hold those women [at the top] in high regard? No, I know how they are, so yeah, I don't see them as role models, let me put it that way."

These quotes highlight in my interpretation that simply having women in leadership positions does not guarantee that they will serve as role models for others. While expert 1 implies the presence of women at various management levels means they are role models, employee 3 expresses a differing opinion, suggesting that the women in those positions may not necessarily inspire or motivate others. These findings lead me to interpret that considering individual qualities and actions is important, rather than solely focusing on representation, when evaluating the potential for someone to serve as a role model.

7.1.3 INDIVIDUAL DIFFERENCES

When asked about gender inequality, five out of six experts (1, 2, 3, 5 and 6) highlighted the importance of considering equity instead of equality, extending beyond just gender. They emphasized the need "to treat people equally while

giving them the opportunities to develop themselves individually and excel” (expert 3). To ensure fairness, measures must often be put in place to compensate for the historical and social disadvantages that prevent women and men from operating on a level playing field (UNESCO, 2003). Diversity also extends beyond gender with levels such as social class, education level, cultural background, sexual orientation, and ability. From my analysis of these results, it appears that the reason for the experts to emphasize equity instead of gender equality could be explained by, as one survey respondent stated ‘organisations are small societies’ and:

Expert 1: “It’s about having a representative at the decision-making table from various groups present in society.”

The experts’ focus on equity was complemented by a notable emphasis on gender identities by several experts (2, 3 and 5) and all interviewed female employees. After scrutinizing these findings, I deduce that this perspective underscores the notion that feminine and masculine characteristics are not exclusive to a particular gender but can be exhibited by any individual, transcending traditional gender boundaries. As one expert states:

Expert 2: “Leaders of the future balance both. They have a healthy feminine side and they have a healthy masculine side and they bring that forward in their working career.”

In contrast to the focus on individual differences, there can also be a focus on the differences between men and women.

7.1.4 GENDER CHARACTERISTICS

From my analysis of the interviews, it appears that many employees in energy organisations hold beliefs about the specific characteristics that men and women should or should not possess. Such expectations about individuals based on their gender can be classified as gender stereotypes. These stereotypes can be harmful as they limit the potential of individuals and perpetuate gender inequality, for example:

Survey Respondent: “Women are assumed to have certain personality traits”

Interestingly, the gender experts interviewed mentioned various assumptions themselves about women, ranging from ‘women are generally not so focused on being visible’ (expert 1) to ‘women many times bring a long-term perspective’ (expert 2) and ‘women are slightly less focused on themselves and more on the collective’ (expert 5). Reflecting on these statements, it is my view that these assumptions could be based on scientifically proven averages, personal experiences, or simply because our brains are wired to make assumptions automatically.

Drawing from the data at hand, my interpretation suggests that organisational culture presents a complex relationship between gender stereotypes and their impact on the workplace, as it is often challenging to determine which aspect is the cause and which is the effect. This complexity is highlighted by the fact that, according to all interviewed female employees (1, 3 and 5), female characteristics are either undervalued or not valued at all within the organisation. This unequal validation of gender-specific traits can lead to dilemmas:

Employee 3: “It’s more a matter of whether, and if so, should you suppress those [women’s characteristics] to get a promotion in certain corporate cultures? Because the culture is such that those characteristics are not appreciated.”

Conversely, multiple experts (1, 3 and 5) mention a new trend in leadership values that could potentially change the perception of individuals. Actively listening to others is increasingly seen as an essential aspect of quality leadership:

Expert 3: “First, are you willing to engage in conversation, and second, are you also willing to listen to aspects that convey a different opinion than yours.”

Based on these findings, I infer that this shift in leadership values may contribute to a more inclusive and equitable organisational culture, one that embraces diverse gender characteristics and breaks free from the constraints imposed by traditional gender stereotypes.

Table 10. Main individualistic aspects found in the data supported by illustrative quotes

Main aspects	Illustrative quote
Awareness	Expert 1: “[Following an experiment during a panel discussion, in which we posed to a male participant the type of questions women often receive], he confessed that he had never previously considered the frequency with which women encounter such uncomfortable questions. This realization was, for him, the most significant ‘aha’ moment of the day.”
	Survey Respondent: “Indeed biases towards gender are often very personal, coming from how people of been raised. This makes it also difficult to address, because often they are completely not aware of their own bias.”
	Employee 2: “Within the [energy] sector, within the [energy] companies, just like in construction for example, I don’t know if you’ve ever walked past a group of construction workers, there it is still really accepted to handle things differently than we might do in the higher segment. So whistling at a passerby, for example. That’s not okay in a workplace.”
Gender Characteristics	Expert 4: “characteristics that we attribute to men, which we see as masculine. If women display these, something doesn’t seem right in our minds. Something goes wrong, and there is something about that woman that makes us deem her unsuitable, so men are perceived differently than women in the business world.”
	Survey Respondent: “I find that people identifying as female tend to be more creative, holistic, communicative and team-oriented than people identifying as male who tend to be more goal-oriented and strategic.”
	Employee 5: “However, I do notice that there is still a strong orientation towards men and technology, with little understanding that women can also comprehend technology just as well.”
Resemblance	Expert 1: “I think we benefit greatly from having a fairly young [male] CEO who demonstrates excellent exemplary behaviour.”
	Survey Respondent: “I think that people choose people who are similar to them. As we have more men, it is to be expected that more men will be hired.”
	Employee 6: “In general, managers hire people who resemble themselves. And if the existing managers are primarily men, they are more likely to hire men.”
Individual Differences	Expert 3: “But at some point, you move more towards equity, where you indeed ensure that people are assessed individually. [] And that means treating people equally, but treating them so equally that you indeed give them the opportunity to develop themselves.”
	Survey Respondent: “There are skills that are more feminine or masculine, but you find them in both man and women.”
	-

7.2 ANALYSING ASPECTS TO ASSEMBLE PRISM

This analysis connects the identified aspects - Awareness, Resemblance, Individual Differences and Gender Characteristics - to provide a comprehensive understanding of the individualistic prism through which one can perceive gender inequality. The theme that connects these aspects is ‘Challenging the Individual: The Persistent Interplay between Attitude and Familiarity’.

Reflecting on the results, it is my view that many individuals hold preconceived notions about how men and women ought to behave and the qualities they possess. The individualistic prism could be interpreted as the perspective of an individual evaluating another individual as a member of a specific gender group. These preconceived notions influence one’s attitude towards different genders. When assumptions dictate that men should have qualities necessary for energy organisations while women should not, it becomes challenging for women to be valued within such organisations. This creates a difficult-to-escape trap, as unconscious biases are inherently unrecognized, and those who are not hindered by these principles generally hold the most power in energy organisations in the Netherlands. Furthermore, the ‘similar-to-me effect’ exacerbates this issue by perpetuating homogeneity within organisations, as individuals tend to associate with and support those who share similar characteristics, inadvertently hindering diversity

and reinforcing gender inequality.

In analysing the interviews with the gender experts, a unique theme emerged that differed markedly from the perspective of the employees. The experts pointed to a noticeable shift in the discourse on gender differences towards an emphasis on individual differences. However, this view did not resonate with employees. Interpreting the available employee interviews, my analysis suggests that their position within the gender discourse remains anchored in the recognition of gender differences rather than an emphasis on individual differences. I construe that this discrepancy may be attributed to the employees' personal experiences of facing consequences that seem to stem from gender-based differences, making them more aware of the prevailing gender disparities in their professional environment.

As mentioned earlier, studies have highlighted that the ineffectiveness of interventions can stem from not engaging with all stakeholders (Benschop & Verloo, 2010; Bleijenbergh & van Engen, 2015). This lack of stakeholder engagement was also observed in the interviews conducted. After scrutinizing the transcripts, I deduce that, in most cases, women experience issues related to their gender and can articulate these challenges quite well. However, when asked if they had reported these concerns to their colleagues or managers, the responses often indicated that their concerns were not taken seriously. This is proof of testimonial injustice, where the knowledge of employees that experienced inequality is not recognized or valued by those in power. Mainly men tended to either downplay the issue or personalize the problem:

Employee 1: *"The men here find it difficult to see a systemic problem separate from themselves. So when I try to address it, I often get responses like, 'But I don't participate in that,' or 'Yes, but you can do everything, even though you're a woman. I don't think you're less capable. I don't think you earn less.' I understand that, but the fact remains that the issue exists."*

Additionally, from the analysis of the transcripts, my reading is that there is a notable difference in the perceptions of gender inequality among employees based on their seniority levels. It seems that employees with different seniority positions may have varying views on the extent and impact of gender inequality within the organisation. Senior employees, having climbed the management ladder, have become more aware of the unconscious bias that still exists in the workplace:

Employee 3: *"Well, I didn't get certain promotions, and the only reason I'm leaving now is because a man with political connections [] has been appointed to the position. It's because I'm not part of that circle of men."*

Survey Respondent: *"more messy at the top than at the lower echelons"*

The more senior employees, as can be established from the survey responses, have observed instances of nepotism, old boys' networks, and sexism that have impacted their career growth and opportunities. However, being in senior roles, they can influence behaviour and bring about changes in the organisation's policies and practices.

On the other hand, junior employees in the survey, who are at the beginning of their careers, have experienced what Sue et al. (2007) describe as microaggressions - brief and commonplace every day verbal, behavioural or environmental indignities, intentional or unintentional, that convey hostile, derogatory or negatively prejudicial slights and insults. These microaggressions, along with discrimination and bias, have a significant impact on their career growth and opportunities:

Employee 1: *"I don't experience too many issues in my day-to-day work. [] However, what affects my career prospects is the idea that the existing management selects people who resemble themselves."*

Survey Respondent: *"I also encountered microaggressions that seem harmless but accumulate to be clearly gender-specific."*

The junior employees from the survey have observed instances of gender-based selection for job promotions and unequal treatment of women in the workplace.

In conclusion, the individualistic prism encapsulates the theme of 'Challenging the Individual': The Persistent Interplay between Attitude and Familiarity', suggesting inherent preconceptions about and associations with different genders. The awareness aspect highlights the role of an individual's upbringing, education and past experiences on their unconscious biases and willingness to act against gender inequality. At the same time, the resemblance

aspect highlights the influential presence of the 'similar-to-me' effect and the role of relatability and role models. The individual differences aspect highlights the importance of recognition of unique personal attributes and gender identity in the promotion of equitable treatment and perceptions. The gendered characteristics aspect highlights the influence of assumptions about gender differences, based on personal experience and evolving leadership paradigms that espouse traditionally feminine values. Interestingly, despite the experts' emphasis on the importance of recognising gender identities and advocating for equity, it was observed that employees in energy organisations are predominantly engaged in the gender debate.

8. Discussion

The discussion chapter of this thesis serves to synthesize the findings of the study and provide a comprehensive understanding of the research outcomes. First, the discussion will address the link between the subject and master program. Then, the answers to the sub-questions will be discussed, shedding light on the specific aspects of the main research question. Subsequently, the sub-section will present the answer to the main research question, which encompasses the framework that combines problem framing with elements from social cognitive theory, systems thinking, and process decision-making. Furthermore, the limitations of the research will be acknowledged, highlighting the potential constraints in the study's design, data collection, and analysis. Finally, the discussion will propose suggestions for future research, emphasizing areas where further investigation could contribute to a more profound understanding of the topic and potential refinements to the proposed framework.

8.1 LINK BETWEEN SUBJECT AND MASTER PROGRAM

This thesis is part of the MSc. Management of Technology (MOT) programme at the Technical University of Delft, Faculty of Technology, Policy, and Management. The research is in line with the objectives of the Master's programme, as it addresses a critical aspect of organisational management in the context of a male-dominated technological field in The Netherlands: gender inequality in Dutch energy organisations. By investigating employees' perceptions of gender inequality, the study provides valuable insights that can guide organisations in better managing their human resources and decision-making, fostering a more inclusive work environment, and ultimately improving overall organisational performance.

Through its transdisciplinary approach, the research provides a comprehensive understanding of the complex interplay between societal aspects, technological advances, organisational elements, and individual perceptions. In collaboration with stakeholders, this study contributes valuable insights to both academically and societally relevant issues within the broader field of technology management. Addressing gender inequality in organisations is not only an ethical imperative, but also essential for realizing the full potential of human capital, fostering innovation and promoting sustainable growth.

8.2 ANSWERS TO SUB-QUESTIONS

In this sub-section, the sub-questions are revisited, key findings are summarized, and their relevance to the main question is elucidated while addressing potential contradictions or unexpected outcomes.

8.2.1 SUB-QUESTION 1

sq1. Which societal aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?

In synthesising the key findings, the societal prism reveals four crucial aspects that influence gender inequality: gender-based assumptions, historical influences, power imbalances and national cultural influences. These aspects have a common thread - they are deeply rooted in historical precedents and societal structures. To illustrate, ingrained gender assumptions often position women as less suited or interested in technical roles, creating systemic barriers to their career progression. These assumptions can subtly influence evaluations and promotion decisions, leading to an undervaluation of women's contributions in technical fields (Kanter, 1977) which enhances the depth of my literary reference base. Historical influences, including generational differences, further perpetuate this inequality. For example, older generations may be more likely to perpetuate traditional gender roles in organisational settings, thereby perpetuating gendered norms (Lyons & Kuron, 2014; Twenge, 2010) which adds another layer to my established literature foundation. Power imbalances within organisations and societies predominantly favour male voices and underpin male-centric leadership structures. Here, Ridgeway's (2011) theory of status characteristics becomes relevant, suggesting that societal beliefs about the competence and worth of different groups, including gender, shape their behaviour and expectations in social interactions, potentially reinforcing male dominance in leadership roles. Finally, national cultural influences, such as the Dutch culture of part-time work, limit women's career opportunities. This is supported by Merens' (2022) study, which adds to my literature base, suggesting that working hours significantly influence the low representation of women in managerial positions in the Netherlands.

An unexpected finding in this study was that employees emphasized the significant role of societal aspects in perpetuating gender inequality, which contradicts previous research on problem framing that predominantly identified agentic explanations aligned with individualistic problem framing (Carian & Johnson, 2022; Wharton & Estevez, 2014;

Wynn, 2020). This discrepancy could be explained by the system justification theory, which posits that individuals have a strong motivation to perceive themselves and their social structures in a favourable light, leading them to view the systems they operate within as fundamentally fair (Jost & van der Toorn, 2012). Drawing upon the results, my interpretation suggests that employees often view society as a distinct external entity, separate from their immediate system. This perspective could lead them to assign the genesis of gender inequality to broader societal aspects, rather than recognising the influence of internal organisational dynamics.

Drawing upon the evidence collected through this study, as visualized in Figure 11 I posit that society serves a dual role in the context of gender inequality. It not only provides a prism through which gender inequality is viewed and understood, but it also influences mental representations as the environment from which one perceives. Reflecting on the outcomes of the events, interviews, and survey, I discern that the environment extends beyond a mere passive backdrop— it's a dynamic arena where intersectionality plays a pivotal role in determining the position from which one perceives gender inequality. Figure 11 serves as a visual metaphor for the societal prism's influence on gender inequality perception. The inner circle symbolizes gender inequality, while the semicircular line surrounding it illustrates the prism. However, it's important to acknowledge that this prism is not isolated. It's embedded within the larger environment (represented by the outer circle) that shapes an individual's mental representations and thus their perceptions of gender inequality. Such intersectionality in individuals' perceptions is to my knowledge not discussed in current literature.

In light of the societal data, I am led to believe that assumptions are an outcome of the mental representation determining how gender inequality is perceived. Assumptions about gender roles and capabilities are cognitive factors that can influence both individual behaviour and the broader environment, such as organisational culture. For a more comprehensive understanding of the data, my interpretation leans on certain theoretical frameworks not previously discussed in the literature review. One such theory is the Social Cognitive Theory, formulated by psychologist Albert Bandura. This theory posits that individuals acquire and maintain certain behaviours based on the interplay of personal factors, environmental factors, and behaviour itself (Bandura, 2003). The central concept in this theory is reciprocal determinism, which implies that the three factors—cognition, including assumptions, environment, and behaviour—affect each other in a bidirectional manner. Although this theory has limitations, for instance the lack of focus on motivation or assumption that changes in the environment will directly change a person, parts of it can be used to integrate into the framework.

Through the aspects of the societal prism, I have identified the presence of causal loops within problem framing, specifically the interplay between the personal factor environment and mental representation. Personal factors, according to the problem-solving theory developed by Newell and Simon (1972), play a central role in the development of a mental representation of a problem situation, which subsequently promotes problem definitions that determine the goals and criteria for a solution. This sequence of steps provides a conceptual framework for problem framing (Pearce & Ejderyan, 2020). Causal loops, not previously discussed in the literature review, visually delineate feedback loops within a system, representing interrelationships and mutual influences between different elements (Haraldsson, 2004). By incorporating such a diagram into the analysis, I argue that both researchers and practitioners can improve their understanding of the dynamics of gender inequality and thereby design interventions that more effectively address underlying assumptions and their impact on behaviour and the environment.



Figure 11. The societal part of the metaphorical arena of wicked problem perceptions

8.2.2 SUB-QUESTION 2

SQ2. Which organisational aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?

My analysis of the organisational prism highlights that the manifestation of gender inequality within an organisation is determined by a multifaceted interplay of aspects such as strategy, organisational culture, policies and variation, in addition to external catalysts. While all of the Dutch energy organisations participating in this study have some form of diversity and inclusivity embedded in their policies and procedures, my findings show that the actual practices of individuals within these organisations often do not align with these stated goals. This mismatch highlights the persistent barriers that organisations face in implementing diversity and inclusion initiatives, a phenomenon not extensively explored in my initial literature review but highlighted by Benschop and van den Brink (2013). I argue that organisational culture, defined in this study as the framework that shapes an organisation's unique identity and operating mechanisms, has a significant impact on gender inequality. This is consistent with Acker (1990), who emphasised the importance of understanding organisational culture in order to dissect the root causes of gender inequality in the workplace. A novel perspective emerging from the data, and supported by Martin (2002), is the existence of unique micro-cultures within individual departments of an organisation, which may differentially influence employees' experiences and prospects. In my interpretation, a further layer of complexity is added by external factors such as legislation and industry trends (e.g., energy transition). These aspects can either pave the way for women's advancement or reinforce existing barriers, depending on the nature of these changes and the organisational response (Clancy & Feenstra, 2019; Ely & Meyerson, 2000; Feenstra & Creusen, 2021). In summary, while organisational systems seem to be evolving faster, I infer that the change in attitudes of individuals within the organisation is lagging behind, resulting in a stagnation of progress in addressing gender inequality.

Drawing from behavioural economics, psychology, and organisational design, Bohnet in her book "What Works: Gender Equality by Design" proposes a range of interventions that can be applied to promote gender equality (Bohnet, 2016). These interventions are based on the idea that, instead of trying to change people's attitudes and beliefs directly, we can change the context in which decisions are made. In a departure from this, my analysis of Dutch energy organisations suggests a disconnect between context and persistent attitudes and beliefs. While the contextual framework for decision making appears to have evolved, ingrained perspectives seem resistant to change. This observed gap between policy formulation and successful implementation of gender equality policies is consistent with concerns raised by several scholars, notably Lombardo (2013) and Martin and MacDonnell (2012), whose work I have considered in interpreting these findings. Based on the findings, I suggest that the stagnation in attitudinal change may be due to a phenomenon known as gender fatigue. This condition occurs when individuals perceive that gender equality has already been achieved, thereby negating the need for further initiatives (Colley et al., 2021b). This perceived complacency may be an important factor contributing to the observed resistance to attitude change.

Based on the data collected to address this sub-question, and as depicted in Figure 12, my interpretation is that the organisation also plays a dual role in the perception of gender inequality. Not only does it act as a prism, but it also forms the inner circle of the arena, serving as the immediate environment that shapes perceptions.



Figure 12. The societal and organisational part of the metaphorical arena of wicked problem perceptions

Based on the findings seen through the organisational prism, my interpretation suggests that integrating steps from process decision-making into problem framing could yield beneficial outcomes. According to Kingdon's (1984) process-based approach, it is essential for a window of opportunity to be open in order to have a shot at resolving the issue. Insight gleaned from employee interviews indicates that, in many organisations, this window is frequently closed due to competing problems or a lack of perceived urgency. In the interviews, there were several instances that indicated a low prioritisation of solving gender inequality within the organisations. For instance, during the interviews, employees 1 and 3 mentioned that people in their organisations were focused on addressing other problems, such as meeting financial instead of gender balance targets or have promoted based on the old boys network instead of merit. Additionally, employee 1 noted that her colleagues did not view gender inequality as a pressing issue, possibly due to a lack of understanding of its consequences. I argue by prioritizing gender inequality issues not only in systems but in behaviour, organisations can create a window of opportunity to implement effective interventions and make progress in achieving a more equal and inclusive work environment.

8.2.3 SUB-QUESTION 3

SQ3. Which individualistic aspects shape perceptions of gender inequality, and how do these aspects interact with personal factors?

A comprehensive understanding of the individualistic prism requires interweaving the identified aspects of awareness, similarity, individual differences and gender characteristics. My interpretation of the research suggests that raising awareness of gender inequality is central to shaping perceptions. In order for change to occur, individuals must first acknowledge and understand the issue (Krentz et al., 2019). Preconceived notions of gendered behaviours and attributes shape attitudes, creating barriers for women in male-dominated organisations. Such gender role stereotypes can lead to biased evaluations and promotion decisions, further entrenching gender inequality in the workplace (Heilman, 2001). The similar-to-me effect, highlighted by Riordan (2000), exacerbates this problem by promoting homogeneity and gender inequality. This effect reflects a tendency to form alliances with those who share similar characteristics, such as gender, thereby perpetuating organisational gender inequalities. In conclusion, generalisations about gender, informed by bias and the interplay of attitudes and familiarity, contribute to perceptions of gender inequality.

A finding observed in the interviews with gender experts, but not with employees, was the belief held by gender experts that the debate on gender differences is transitioning towards individual differences. Through my examination of these results, I propose that the assertion by gender experts may be influenced by their inherent biases. Given their engagement in research, policy development, and implementation of interventions aimed at fostering gender equality, gender experts might possess an optimistic view of the progress being made in addressing gender disparities. Nevertheless, this perspective may not accurately reflect the experiences of employees who continue to encounter gender disparities in the workplace, which might arise being in the organisational environment.

Interpreting the results of the individualistic prism, and as illustrated in Figure 13, I argue that the individual also plays a dual role in understanding gender inequality. The individual not only acts as a prism, but also represents itself. Each individual occupies a unique position in the arena of gender inequality due to their intersectionality, which means that each person perceives the problem from



Figure 13. The metaphorical arena of wicked problem perceptions

a different angle. Furthermore, an individual's proximity to the problem varies according to their knowledge and environment.

Based on my understanding of the findings of the individualistic prism, I posit the role of mental representations in shaping awareness, which I define as the extent of understanding and recognition individuals possess regarding gender inequality. The interviews elucidated that the consolidation of understanding and recognition facilitates prioritisation, as demonstrated by the juxtaposition of challenges encountered while addressing gender inequality due to insufficient recognition from male colleagues, and the awareness of male employee 2 in ensuring a safe organisational environment for women. This leads me to believe there is a causal loop between awareness and prioritisation. Conversely, in the absence of recognizing the distinct manifestations of gender inequality within an organisation, there is a lack of drive to address the issue. Furthermore, reflecting on the outcomes of the research, I discern that assumptions contribute to a causal loop with the prioritisation of gender inequality. For instance, a hiring manager's assumption about women lacking technical aptitude may result in energy organisations deprioritizing efforts to recruit more women, as they might perceive women to be less capable or interested in assuming technical roles.

8.3 ANSWER TO MAIN QUESTION

This study aimed to answer the research question How do perceptions of gender inequality among employees in Dutch energy organisations emerge from the interplay of societal, organisational, and individualistic aspects, as well as personal factors? In response to this question, the study resulted in the development of a novel, comprehensive framework that presents the interplay of wicked problem perceptions and personal factors through the metaphorical prisms formed by societal, organisational, and individualistic aspects. The aim of this study was to identify aspects contributing to gender inequality, to show the interdependencies of the issue, and to highlight potential intervention points for implementing change while considering the dynamic interaction between the prisms and personal factors.

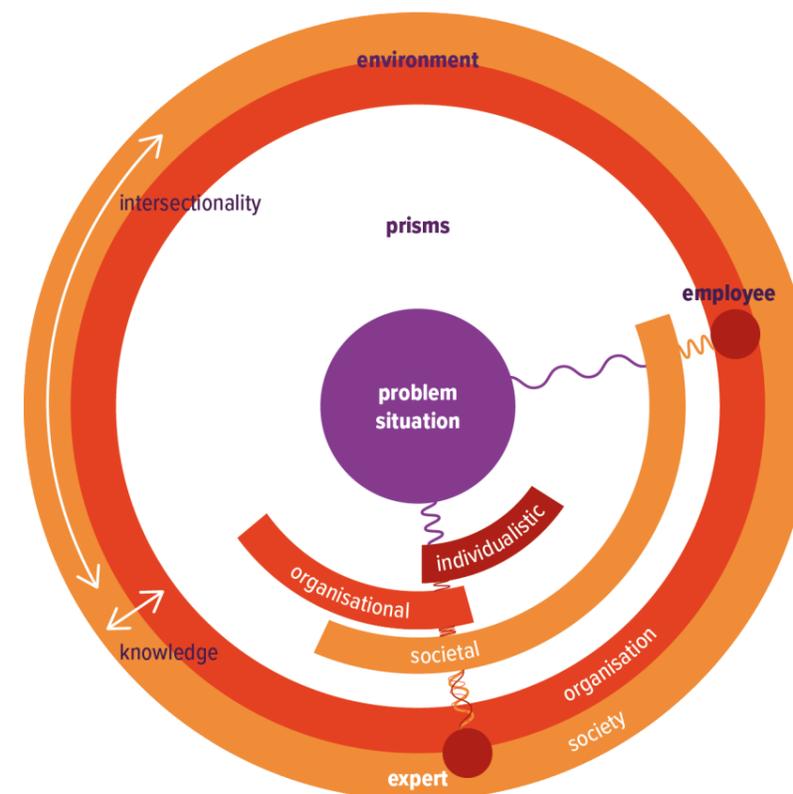


Figure 14. The Arena - visual representation of the interplay of wicked problem perceptions

The sub-questions have led to a visual representation of the interplay of perceptions, as shown in Figure 14, called the 'arena'. The problem situation, positioned centrally, serves as a light source, refracted by the surrounding societal, organisational and individual prisms. These prisms, which are dynamic in nature, can act individually or in combination. The 'arena chairs' represent different perspectives, with the outermost representing society and the innermost representing the organisation. For example, an employee is located in the inner organisational layer, while a gender expert is located between the societal and organisational layers. The position within the arena is dictated by intersectionality and knowledge, resulting in each individual perceiving a different refracted reflection of the problem.

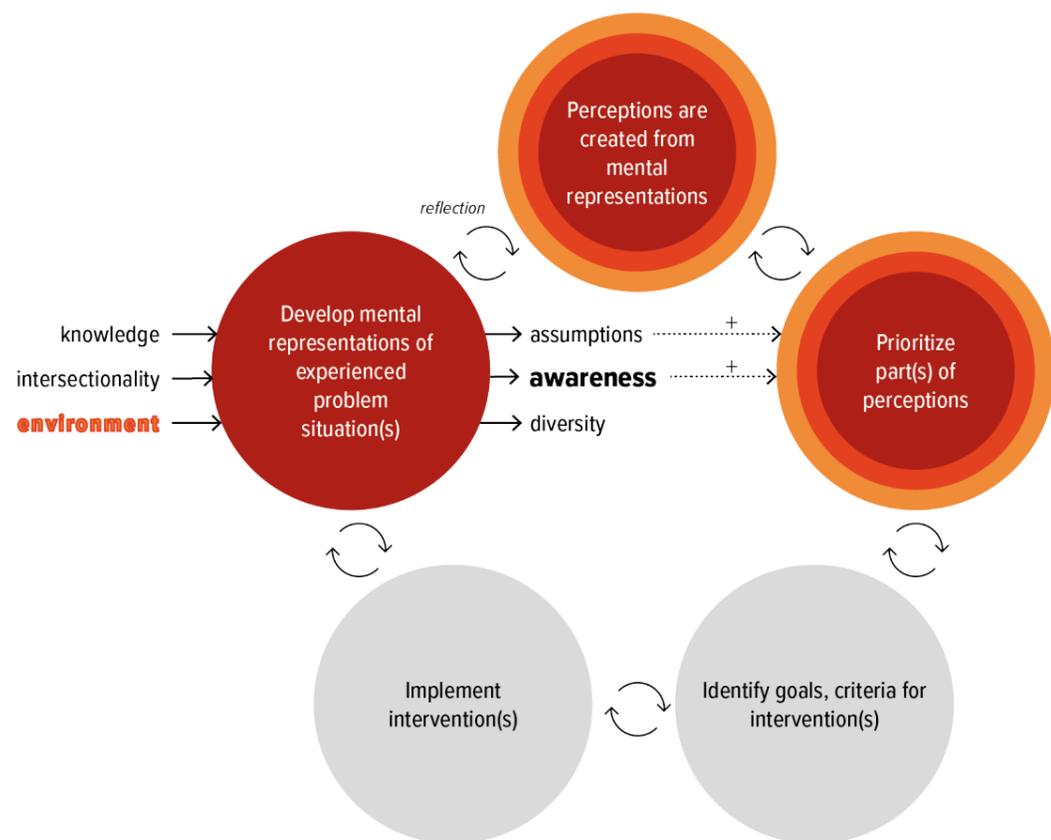


Figure 15. The novel framework that presents the interplay of wicked problem perceptions through the metaphorical prisms formed by societal, organisational, and individualistic aspects

Figure 15 provides a detailed representation of the novel framework. It shows how mental representations of experienced problem situations, shaped by environment, knowledge and intersectionality, influence cognitive processes, including assumptions, awareness and diversity. These mental representations shape perceptions of the problem and consequently determine the prioritisation of perceptions. Every step in the framework is reflexive, emphasising ongoing self-examination and critical reflection on personal biases, values, beliefs and experiences and their potential impact on the interpretation of research. The framework also recognises the causal loops that exist between environment, assumptions, perceptions and prioritisation, thereby capturing the dynamic interplay of elements that contribute to understanding and potentially mitigating gender inequality in Dutch energy organisations.

The grey areas in the framework, although not explored in this study, can guide future research and solutions. The conceptual framework of problem framing suggests that the next step is to identify goals and criteria for solutions. Based on the data collected, my interpretation suggests that solutions should take the form of interventions because a wicked problem has no single solution. Based on the exploratory reading of literature, my interpretation suggests that the implementation of the intervention(s) should be the final step, as they could potentially change a mental representation with the ultimate goal of creating gender equity.

The development of a mental representation of a problem situation is shaped by an individual's experiences, knowledge, and environment (Pearce & Ejderyan, 2020). I define a mental representation as the collection of cognitive structures that store information about objects, events, or concepts in the mind. They can be in the form of mental images, concepts, or abstract ideas. These representations enable to understand, interpret, and interact with the world around someone. Reflecting on the results, it is my view that experience is a critical component of a problem situation. The findings from the literature review underscore the significance of personal experience as an essential element of understanding and recognizing the problem (Carian & Johnson, 2022; Cech & Blair-Loy, 2010; Heijstra et al., 2013; Wharton & Estevez, 2014) and therefore is included in the mental representation. An experienced problem situation in this framework includes personal encounters, interactions, and observations related to a particular problem and is influenced by personal factors such as knowledge, environment, and intersectionality. The environment can be both the organisation and society.

Incorporating intersectionality allows the mental representation of a problem situation to take into account the complex and diverse experiences and perspectives of individuals. This approach recognises the different ways in which different social identities intersect and influence one's perception of a particular issue. Consequently, the first step in developing multiple mental representations of one or more experienced problem situations is to consider the following personal factors:

- **Knowledge:** This refers to the information, facts and understanding that an individual has acquired through education, training or self-learning.
- **Environment:** The environment includes the societal and organisational contexts in which an individual operates. It includes factors such as family background, social norms, workplace culture and societal expectations.
- **Intersectionality:** This concept recognises the interconnected nature of social categorisations such as race, gender and class, which contribute to the creation of overlapping and interdependent systems of discrimination or disadvantage.

Based on findings from the societal prism, I infer that assumptions can be the result of mental representations. Social cognitive theory, developed by the psychologist Albert Bandura, posits that individuals acquire and maintain certain behaviours based on the interplay of personal factors, environmental factors, and the behaviour itself (Bandura, 2003). Reflecting on the findings from an individualistic prism, it is my view that mental representations shape cognitive processes, such as awareness, assumptions, and diversity, in understanding gender inequality. Thus, cognitive processes can be divided into:

- **Assumptions:** These are the beliefs, opinions or preconceived notions that individuals hold about gender based on their personal context. Assumptions can influence how people perceive and interpret information related to gender inequality.
- **Awareness:** This refers to the level of understanding and knowledge that individuals have about gender inequality. Awareness can shape people's mental representations and influence the extent to which they recognise the scope, importance and potential interventions.
- **Diversity:** This aspect captures the recognition and appreciation of differences between individuals across a range of dimensions, including but not limited to gender, race, ethnicity and age. Embracing diversity in cognitive processes enables a more comprehensive and nuanced understanding of gender inequality.

According to Pearce & Ejderyan (2020), after the creation of mental representations, a definition and formulation of the problem would arise. As stated in the literature review, creating a definition of gender inequality seems impossible. Gender inequality is a multifaceted wicked problem operating in a network. There is only a perception of the issue (Lincoln & Guba, 1985). I define the perception created from a mental representation as the process of organizing and interpreting sensory information gathered from the environment to form a coherent understanding. Perception involves recognizing and interpreting stimuli, as well as integrating them with an existing mental representation.

Drawing from the results derived from the organisational prism, my interpretation suggests the potential benefits of incorporating a step from process decision-making into problem framing. In a process-based approach, the window of opportunity must be open to have a chance at solving the issue (Kingdon, 1984). In the new framework, this step is called the prioritisation of the issue:

- **Prioritisation:** Prioritisation involves determining the relative importance of various aspects or dimensions of gender inequality, guiding the allocation of resources, attention, and effort. Prioritisation is influenced by awareness and assumptions.

After the prioritisation step, the identification of goals and criteria for interventions takes place, which belongs to the conceptual framework of problem framing. The implementation of the intervention then occurs, where drawing from the data at hand my interpretation suggests a policy-implementation gap exists.

To better illustrate the differences between mental representation, perception and prioritisation in the new framework, an example of creating a drawing can be used as a metaphor:

1. **Mental representation:** Before you start drawing, you visualize the picture you want to create in your mind. This mental image serves as your mental representation, guiding your actions as you proceed with the drawing/
2. **Perception:** As you begin to draw, you observe the different colours of the crayons and the texture of the paper. You also notice how applying different amounts of pressure with the crayons results in varying shades and intensity of colours. Your perception helps you process these sensory inputs and integrates them with your existing mental representation to create a coherent understanding of the drawing process.
3. **Prioritisation:** While working on your drawing, you decide which elements need to be drawn first, which colours to use, and how much detail to include. You prioritize certain aspects of the drawing, like the main subject or specific details, based on their importance, relevance, or personal preference. This prioritisation process helps you manage your time and resources efficiently while creating the final artwork.

The perceptions of gender inequality in Dutch energy organisations are based on mental representations that influence cognitive processes. This leads to the prism(s) employees use to perceive the issue, which leads to a level of prioritisation of certain aspects of the issue. Through my examination of these results, I propose that prioritisation is primarily influenced by awareness. Experiences like microaggressions or sexism seem to increase the awareness and thereby prioritisation of gender inequality. It appears challenging to increase awareness by factors other than experience with the problem situation. For example, drawing from the interviews, by providing training to increase knowledge or granting more power to change the organisational environment. This is similar to the findings in literature (Carian & Johnson, 2022; Cech & Blair-Loy, 2010; Heijstra et al., 2013; Wharton & Estevez, 2014). Interpreting the findings, it also becomes apparent to me that the environment, in its day-to-day manifestations, can substantially impact the nature of experiences. This seems to be exemplified by the influence of organisational culture on individuals' daily encounters and perceptions. Knowledge does not seem to have a direct impact on awareness of gender inequality and thus prioritizing it. On the other hand, it is my view that experiences also influence assumptions. Mainly by attributing one experience with an individual to every similar individual. This can be one woman not being technically qualified, creating the assumption women are not technically qualified. But it can also be a senior man using nepotism, creating the assumption all senior men will be against you. These results can contribute to interventions to gender inequality in organisations by providing insights into the aspects that influence perceptions, awareness, and prioritisation of gender inequality. By understanding these aspects, organisations can develop more targeted and effective interventions.

8.4 LIMITATIONS

This sub-section addresses the limitations of the research, providing a foundation for future research recommendations. By acknowledging these limitations, researchers can develop a more comprehensive understanding of the issue of gender inequality and identify areas where additional investigation is needed.

Limited attention to other employees

This study has limitations related to the participants involved in the research. Most of the participants were women, predominantly from the 75inQ community. This may have introduced a certain degree of bias in the perspectives and experiences shared by the respondents and interviewees. Moreover, all the participants were highly educated and white, which may have limited the range of viewpoints and experiences in relation to gender inequality within Dutch energy organisations. More diverse participants in terms of gender, educational background, and ethnicity could add more nuance to the results and could lead to new insights concerning intersectionality.

Time scope was single point

As the study was conducted at a specific point in time, the findings may not accurately reflect the evolving nature of gender inequality within Dutch energy organisations. Longitudinal research could provide a better understanding of changes in the issue over time.

Strength of causal loop is unknown

Although the study has uncovered relationships between various aspects contributing to gender inequality, it is difficult to ascertain the precise strength of these causal loops. Without a more robust understanding of the strength and direction of these relationships, it is challenging to determine the most effective interventions to address gender inequality within Dutch energy organisations. Future research should focus on further qualitatively investigating and employing semi-quantitative methods to explore these causal relationships, enhancing our understanding of the issue and guiding the development of targeted, effective interventions.

Emphasis on large energy corporations

Most participants in this study come from large corporations, which represent the majority of energy companies. While this provides valuable insights into the experiences of employees within these organisations, it may not accurately capture the perspectives of those working in smaller, maybe more focused on sustainability, companies. Different organisational structures, cultures, and policies could lead to varying experiences of gender inequality, and thus, the findings of could be made more generalizable by investigating smaller sustainable companies.

8.5 REFLECTION ON THE RESEARCH APPROACH

In this sub-section, a reflection on the research approach is provided, examining the strengths and weaknesses of the chosen methodology. The implications of the methods utilized for data collection and analysis are discussed, shedding light on the potential influence on the study's outcomes.

8.5.1 DUTCH ENERGY ORGANISATIONS

In terms of the research approach, the decision to focus on Dutch energy organisations significantly increased the depth and specificity of the study, resulting in insightful and detailed findings that can be extrapolated to broader contexts. Although the study focused on the energy context, the findings can potentially shed light on the dynamics of gender inequality in other male-dominated, highly technical, regulatory environments. In particular, the construction industry, which is often mentioned at events, shows parallels that could allow for a cross-industry understanding of gender inequality. This research is not only comprehensive but also versatile in its applications. Although the findings are rooted in the Dutch context, they provide an invaluable starting point for understanding experiences of gender inequality in energy organisations worldwide. The differences in cultural, social, and legal frameworks between countries may influence the manifestations of gender inequality, and the findings of this study can guide further research to uncover these intricate nuances and variations.

8.5.2 TRANSDISCIPLINARY RESEARCH

The use of a transdisciplinary methodology in this research has been an important catalyst in facilitating a comprehensive and multidimensional exploration of problem framing. This approach harmoniously combines the rigour of academic investigation with practical perspectives, thereby providing unique, real-world elucidations of

theoretical constructs and highlighting modern instances of inequality. The cross-disciplinary implications of this methodological approach confirm the potential applicability of this study's findings across different disciplines and settings. In addition, this study highlights the immense value of the diverse perspectives of workers, which arguably rival the depth of expert knowledge, in enhancing our understanding of gender inequality. Through this research, the transdisciplinary approach has proven to be an indispensable tool in confronting and deconstructing wicked societal problems such as gender inequality.

A methodological contribution has also been made through the use of transdisciplinary methodology. In the work of Pohl et al. (2021), perspectives are treated as thought-styles. In the context of gender inequality, thought-styles and perceptions may be closely related, as they both refer to the way individuals interpret and make sense of wicked problems. Both thought-styles and perceptions are influenced by an individual's background, values and beliefs, which can lead to different assessments of complex societal issues such as gender inequality. But thought-styles are shaped by the collective experiences and knowledge of a group, while perceptions are an individual's interpretation of sensory information in their environment. Through my research, I have found that the thought-styles of certain groups are overemphasised, while others are underemphasised. I also found that each individual has a different position and environment, and that looking at collectives alone often overlooks the refracted reflection of the individual. Thus, the shift from thought-styles to perceptions can be seen as my methodological contribution, as it sheds light on recognition injustice and the under-researched cross-section of the individualistic and organisational prism.

8.5.3 SURVEY

The use of a survey as a research tool in this study proved to be extremely beneficial, despite the initial challenges. Whilst the early stages were challenging in terms of obtaining a significant number of responses, the strategic use of reminders and follow up significantly improved the response rate. This in turn resulted in a more diverse and representative sample of 74 respondents, encompassing various seniority levels, company sizes, genders and job titles within the Dutch energy sector. The survey, designed with a combination of closed and open-ended questions, provided participants with the space to articulate detailed insights into their perspectives and experiences of gender inequality. This semi-quantitative approach not only facilitated the identification of patterns and themes, but also proved instrumental in formulating more focused questions for subsequent interviews. In addition, the survey results served as a robust tool for cross-checking the findings derived from the interviews, thereby enhancing the reliability and validity of the study. This method thus strengthened the study's comprehensive exploration of gender inequality in the Dutch energy sector.

8.5.4 IN-DEPTH INTERVIEWS

The decision to include in-depth interviews as a fundamental component of this research methodology, while time-consuming, has proved to be a tremendous asset. Indeed, each interview session, which lasted 60 minutes for gender experts and 30 minutes for employees, and the subsequent transcription and analysis process required considerable time and effort. However, the rich and nuanced insights gained far outweighed these challenges. The interviews provided a unique opportunity to delve into the participants' perspectives, experiences and emotional responses to gender inequality in their respective professional environments. The format of the interviews, which allowed for extensive responses and in-depth exploration of topics, added a remarkable depth and richness to our understanding of gender inequality in the Dutch energy sector. In addition, the interviews provided a unique insight into the corporate culture of the energy companies and the personalities of the interviewees, which further enriched the data. The in-depth interviews therefore contributed to a more comprehensive and detailed picture of the topic under study and strengthened the ability to create a novel framework.

8.5.5 OBSERVATIONS AT EVENTS

Reflecting on the observational aspect of the research methodology, attending various events related to gender inequality was an important part of this study. These events provided a valuable opportunity to immerse myself in the contemporary discourse on gender inequality, while maintaining the distance of an observer. This unique perspective allowed me to absorb and understand the complex dynamics of the issue in real time, in a real-world context. The observational approach also provided an unexpected learning platform. By watching others ask questions during panel discussions, I was able to identify patterns in questioning techniques, observe respondents' reactions, and gain insights from the answers. This indirect model of interaction provided an excellent opportunity to learn from the perspectives and experiences of others without directly influencing the discourse. In addition, these events brought

me into contact with a number of influential and inspiring individuals. Their passion and commitment to addressing gender inequality fuelled my own motivation and commitment to my research, providing a much-needed boost during the more challenging phases of the study. Although the results of these events were not directly reported in this study, their influence cannot be underestimated. The experience provided me with a unique prism through which to view my research, adding a layer of context and understanding to my approach to the study of gender inequality.

8.5.6 CONVERSATIONS WITH RESEARCHERS

Reflecting on the research process, I have to admit that the journey of exploring gender inequality through conversations with different researchers was not always a smooth one. Starting with a blank canvas and carving out a specific research topic proved to be a significant challenge, especially given the immense scope and complexity of gender inequality as a field of study. This challenge was compounded by the open-ended nature of the conversations, which did not always provide clear, direct answers, but often led to further discussion and sometimes even more questions. However, this ambiguity was an essential part of the learning process, forcing me to critically analyse, adapt and refine my research focus on an ongoing basis. Despite these struggles, conversations with researchers were enlightening, revealing the breadth of the topic and the multifaceted nature of gender inequality. Unlike many technical issues, gender inequality does not present a clear black and white scenario. Instead, it unfolds as a complex interplay of cultural, societal and individual factors that require a nuanced and multidimensional approach to fully understand. In retrospect, these conversations were invaluable, despite - or perhaps because of - their inherent challenges. They honed my critical thinking skills, deepened my understanding of the complex dynamics of gender inequality and, most importantly, fostered my growth as a researcher. They have been instrumental in shaping this research and my approach to problem solving in general.

8.6 REFLECTION ON THE RESEARCH QUALITY

An assessment of the research quality is presented in this sub-section, addressing the trustworthiness and rigor of the study. The criteria of credibility, transferability, dependability, and confirmability are considered, offering insights into the validity and reliability of the findings and positionality of the researcher.

8.6.1 VALIDITY

The validity of this study was greatly enhanced by the use of a variety of research methods, each of which provided a wealth of valuable insights into the issue of gender inequality. The participants, experts and staff, engaged through a survey, in-depth interviews, events and informal conversations, demonstrated impressive articulation and knowledge. However, the majority were highly educated and white, which may not fully reflect the diversity within Dutch energy organisations. This potential limitation highlights the opportunity for future research to include a wider range of participants, thereby broadening the range of experiences and perspectives captured. Nevertheless, the current dataset provides a substantial basis for understanding the dynamics of gender inequality within Dutch energy organisations.

8.6.2 RELIABILITY

The reliability of this research was enhanced by the multi-pronged approach to data collection and the alignment of findings with existing literature. The semi-structured interviews, although unique and difficult to replicate, provided rich and nuanced insights into the perspectives of experts and employees. These interview data, accurately transcribed, were supplemented by a survey, observations at events and informal discussions with the researchers, thus widening the range of perspectives gathered. The logically structured survey ensured consistent data collection and the integration of expert insights further substantiated the findings. Combining these different methods and aligning them with established literature strengthened the reliability of the study, resulting in a comprehensive and robust exploration of gender inequality in organisations.

8.6.3 POSITIONALITY

Reflecting on my positionality as a student researcher, I recognise the potential influences this may have had on the responses I received from my interviewees. Whilst there was often a significant age difference between me and the participants, this may have created an interesting dynamic and brought fresh perspectives to our conversations. Being on the cusp of graduating with a technical background, I found that I resonated with the target demographic for HR professionals. My personal experience in a male-dominated educational environment seemed to foster a

sense of rapport with women in technical roles, creating a space for them to share their concerns and narratives. I suggest that this shared understanding could have enriched the depth of our discussions. Similarly, my gender may have influenced the openness of male interviewees, particularly in discussions of gender inequality. Some of the male participants' comments about being open during the interview underline this observation. For future research, it might be instructive to explore the potential impact of different researcher positionalities. This could provide further insights into the subtleties of how the interviewer-interviewee dynamic influences the data collected, thereby strengthening the robustness and diversity of the findings.

8.7 FUTURE RESEARCH

In this sub-section, future research recommendations are provided, building upon the findings and limitations of the present study. Potential avenues for further investigation and refinement are outlined, aiming to contribute to a more comprehensive understanding of gender inequality in Dutch energy organisations.

Diversifying and broadening the sample

Future research could greatly benefit from diversifying the sample of participants. This would involve the inclusion of employees from a range of backgrounds, particularly those with no previous familiarity with gender issues, with a particular focus on individuals involved in operations within the energy sector. The inclusion of such diverse perspectives would undoubtedly provide a more comprehensive and nuanced understanding of the ways in which gender inequality is experienced within energy organisations. In addition to diversifying the pool of participants, a meaningful extension of this research would include the exploration of smaller and more sustainable energy companies. These companies may have different organisational structures, cultures and policies that may affect gender inequality differently than larger companies. Understanding these dynamics could provide unique insights into the organisational environment and its influence on mental representations and the use of prisms.

Applying a mixed-method

To further elucidate the prisms through which gender inequality is viewed, future studies could consider integrating a Participatory Value Evaluation (PVE) methodology. This mixed-methods strategy not only empowers participants by actively involving them in both the design and evaluation phases of the research project, but also accommodates the potential diversity and even conflict in participants' perceptions, values and priorities regarding gender inequality. By using PVE, researchers can gain a more nuanced understanding of how individuals perceive gender inequality. This methodology could include questions similar to those used in the survey of the current study, thus providing a dynamic platform for exploring and evaluating different perspectives on gender inequality.

Replication in analogous industries

To validate the generalisability of the findings, future research should consider replicating the study in industries with similar characteristics, particularly male-dominated, highly technical and highly regulated sectors. Suiting industries would be construction, engineering, and technology. The construction industry, for example, provides an ideal parallel for cross-industry comparisons of gender inequality. Reference could be made to Jet van Eeghen's (2023) study of gender imbalance in the construction industry, with a particular focus on Strukton's corporate culture and recruitment practices.

Exploring intervention strategies

Future research should explore and evaluate specific interventions designed to reduce gender inequality. This research should focus on the framework identified in this study, which postulates that mental representations give rise to assumptions and perceptions, which in turn shape prioritisation. The interventions to be evaluated should be designed to engage with this cognitive process in order to change perceptions of gender inequality. In conducting this research, the transition from single-loop to double-loop learning should be taken into account. Single-loop learning involves identifying and correcting errors within an existing set of governing variables, whereas double-loop learning involves questioning and potentially changing these governing variables themselves. In the context of this research, single-loop learning might involve refining interventions based on feedback or observed outcomes. Double-loop learning, on the other hand, might involve challenging and redefining the underlying assumptions, beliefs and values related to gender inequality based on what is learned from the evaluation of the intervention.

Gender of the researcher

Engaging a male researcher to conduct similar studies could provide different insights into gender inequality, and

potentially uncover unique challenges and opportunities for addressing the issue. This approach will be implemented in 2023 by Saravana Kumar Elango, a fellow PhD student at TU Delft, who is studying women's leadership development.

Contextual grouping of experiences

Future research should explore the personal factors that shape participants' perceptions of gender inequality. The findings of this study have pointed to a complex arena in which an individual's perspective is influenced by a confluence of factors such as their immediate environment, knowledge base and intersectional identity. This highlights the need for a more nuanced exploration of these personal factors, which could potentially be grouped into distinct categories or 'boxes' within the larger arena. To realise this research, an in-depth qualitative methodology could be used to capture the richness and complexity of participants' personal contexts. Interviews, focus groups and participant observation could be used to gather data on a range of personal factors such as family composition (e.g., having daughters), relationship dynamics (e.g., being in a relationship with someone of a different gender) and professional status (e.g., holding senior positions). In addition, the research could also explore the potential impact of these personal factors on the development and use of a 'prism' for understanding gender inequality. By exploring the potential links between personal factors and the prism, future research could shed light on the ways in which personal experiences and contexts shape cognitive frameworks and thereby influence perceptions of gender inequality.

9. Conclusion

The conclusion presents a synthesis of the findings, shedding light on the interplay of perceptions of gender inequality among employees in Dutch energy organisations. This synthesis highlights the scientific and societal contributions of the research, contributing to a deeper understanding of the wicked problem at hand.

9.1 SUMMARY OF RESEARCH OBJECTIVE AND METHODOLOGY

The primary objective of this research was to examine the perceptions on gender inequality in Dutch energy organisations through a comprehensive and multi-dimensional analysis, using individual, organisational, and societal prisms. This approach facilitated the identification and discussion of the multitude of aspects contributing to gender inequality in these organisations. It also demonstrated the complexity of the issue by highlighting the interdependencies between different aspects of the issue and the need for multifaceted interventions.

This research used a qualitative transdisciplinary case study approach to explore perceptions of gender inequality among employees in Dutch energy organisations. A combination of data collection methods, including literature, conversations with researchers, in-depth interviews with gender experts and employees, a survey of employees and observations at relevant events, was used to gain insights into the issue. The research design incorporated theoretical frameworks such as problem framing and process-based decision making to guide the research. Data analysis was carried out using content analysis to identify patterns, relationships and trends in the data collected. The research methodology aimed to address the main research question and its associated sub-questions, providing valuable insights and potential intervention points for addressing gender inequality in Dutch energy organisations.

9.2 SUMMARY OF FINDINGS

The central theme of the societal prism, entitled 'Precedent Breeds Culture: The Societal Roots of Organisational Norms', emphasises the role that long-standing societal customs and expectations play in shaping gender inequality within Dutch energy organisations. A thorough examination of the aspects, such as gender-based assumptions, historical influences, power imbalance and national cultural influence, identify the ways in which historical patterns and deeply rooted societal norms continue to influence both the workplace environment and employees' attitudes towards gender equality. Employees particularly emphasise the profound influence of society, as these aspects have a common basis in precedents with deep historical roots. Drawing upon the evidence collected through the societal prism, I posit that society serves a dual role in the context of gender inequality. Society not only provides a prism through which gender inequality is viewed and understood, but it also influences mental representations as the environment from which one perceives. It forms a metaphorical dynamic arena where intersectionality plays a pivotal role in determining the position from which one perceives gender inequality.

The central theme of the organisational prism, entitled 'Systems Outpace Attitudes: The Stall of Organisational Advancement', highlights the complex relationship between structural issues and entrenched attitudes that contribute to the persistence of gender inequality within organisations. This theme examines several aspects, such as strategy, organisational culture, policy and variation, and external catalysts, that are united by their role in illustrating how personal attitudes often lag behind the systemic progress of an organisation. My interpretation is that the organisation also plays a dual role in the perception of gender inequality. Not only does it act as a prism, but it also forms the inner circle of the metaphorical arena, serving as the potential environment that shapes perceptions.

The central theme of individualistic prism, entitled 'Challenging the Individual: The Persistent Interplay between Attitude and Familiarity', suggests inherent preconceptions about and associations with different genders. By examining aspects such as awareness, resemblance, individual differences, and gender characteristics, it became apparent generalisations about gender, informed by bias and the interplay of awareness and familiarity, contribute to perceptions of gender inequality. A potential shift in leadership values towards active listening and acceptance of diverse gender characteristics can foster a more inclusive and equitable organisational culture, moving beyond traditional gender stereotypes. Interpreting the results of the individualistic prism, I argue that the individual also plays a dual role in understanding gender inequality. The individual not only acts as a prism, but also represents itself. Each individual occupies a unique position in the metaphorical arena of gender inequality due to their intersectionality, knowledge and environment, which means that each person perceives the problem from a different angle.

This study aimed to answer the research question: *How do perceptions of gender inequality among employees in Dutch energy organisations emerge from the interplay of societal, organisational, and individualistic aspects, as well as personal factors?* The study resulted in the development of a novel, comprehensive framework that presents

the interplay of wicked problem perceptions through the metaphorical prisms formed by societal, organisational, and individualistic aspects alongside personal factors. The findings led to the creation of an 'arena' that represents the complex interplay of these aspects and personal factors. Central to the 'arena' is the 'problem situation', whose light is refracted by societal, organisational, and individual 'prisms' that form unique reflections on the 'arena chairs', dictated by one's intersectionality and knowledge. The novel framework illustrates how mental representations of the problem, influenced by environment, knowledge and intersectionality, shape cognitive processes and perceptions of the problem. These perceptions then determine prioritisation. The framework emphasises reflexivity and highlights the dynamic causal loops between environment, assumptions, perceptions, and prioritisation. It thus provides a comprehensive understanding of gender inequality in Dutch energy organisations and offers potential entry points for change.

9.3 SCIENTIFIC CONTRIBUTION

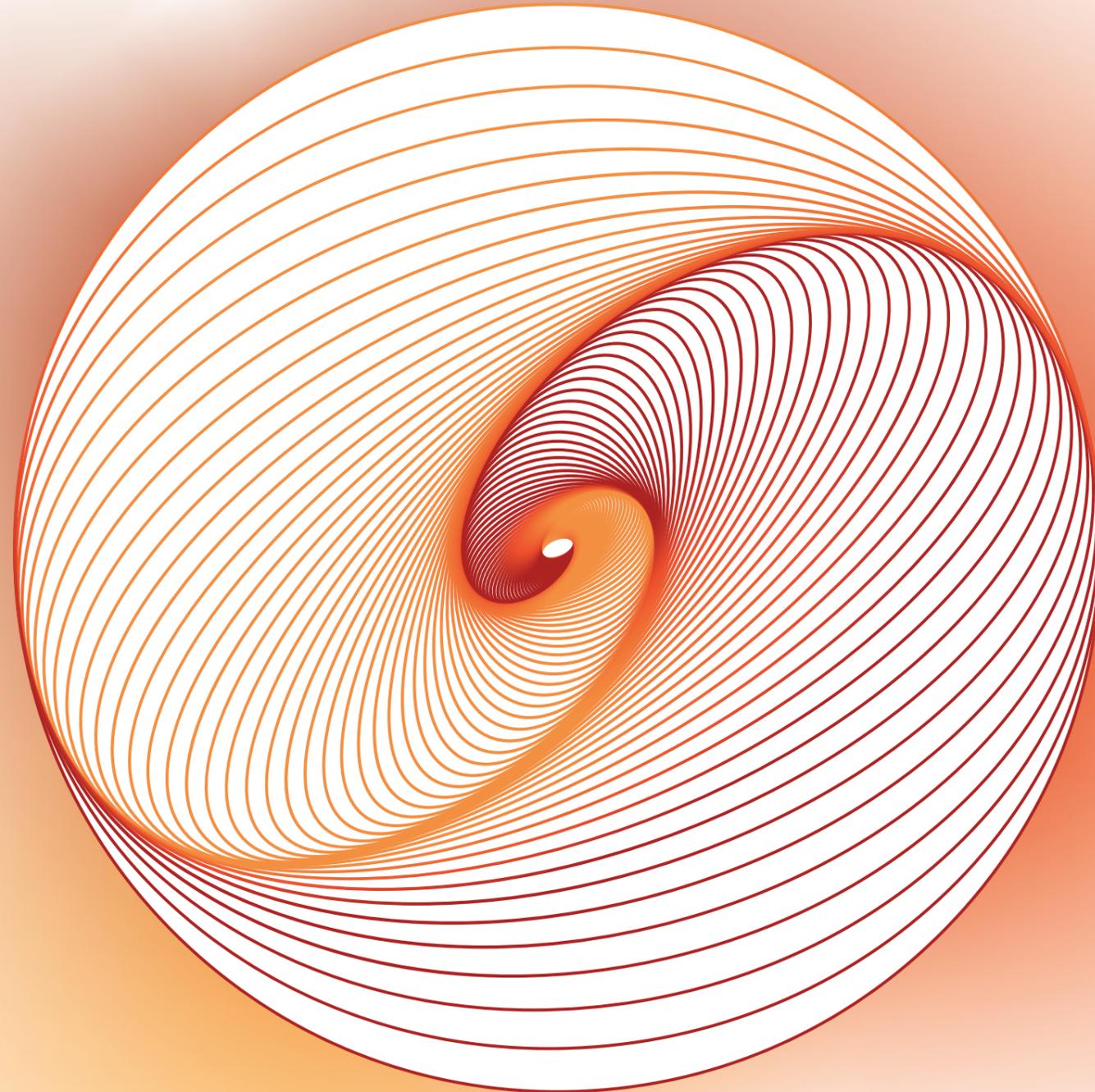
The scientific contribution of this research lies in its unique and broad methodological approach, the depth and specificity of its focus, and the development of a novel framework for understanding gender inequality in Dutch energy organisations, with potential applicability in similar contexts worldwide. By focusing on Dutch energy organisations, this study has provided deep and detailed insights into gender inequality in a context that is representative of other male-dominated, highly technical regulatory environments. This focus has facilitated the development of a robust and versatile framework that can guide further research in different cultural, social and legal contexts.

Methodologically, this research has advanced the use of a transdisciplinary approach to the study of wicked societal problems such as gender inequality. It has demonstrated how this approach can provide a comprehensive, multi-dimensional exploration of the problem, combining academic rigour with practical perspectives. Furthermore, the research has contributed to the discourse on transdisciplinary methodology by shifting from collective ways of thinking to individual perceptions. This shift highlights the importance of recognising individual experiences and perceptions and their influence on problem framing and understanding.

9.4 SOCIETAL CONTRIBUTION

The societal contribution of this research is multifaceted, extending beyond the academic realm to real-world applications that can drive meaningful change in addressing gender inequality. The development of a comprehensive framework for understanding gender inequality provides a tool for stakeholders in different sectors to identify and address instances of inequality. The framework's emphasis on perceptions and their interplay with societal, organisational, individual and personal factors provides a nuanced perspective that can guide policy-making, organisational practices and individual actions. This can inform interventions aimed at reducing gender inequality, ranging from corporate diversity initiatives to public policy measures. The findings of this study can serve as a valuable resource for educators, advocates and activists working in the field of gender equality. By shedding light on the complex dynamics of gender inequality in the workplace, this research can inform strategies to raise awareness, educate stakeholders and advance initiatives aimed at promoting gender equality.

Finally, this research contributes to society by providing actionable insights and tools to address gender inequality and promote a more inclusive and equitable future for all.



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A. Glossary

Concept	Definition
Gender equality	Gender equality is the state of equal opportunities, rights, and treatment for individuals of all genders, irrespective of their assigned sex at birth. This includes access to resources, services, and decision-making processes, as well as the elimination of gender-based discrimination (United Nations, 2015).
Gender equity	Gender equity refers to the process of ensuring fairness and justice in the distribution of opportunities, benefits, and resources among individuals of different genders. It aims to address historical and structural gender-based disadvantages by implementing policies and practices that promote gender equality (UNESCO, 2003).
Gender balance	Gender balance is the proportional representation of different genders in a given context, such as a workplace, board of directors, or political body. It is an indicator of diversity and is often considered essential for fostering gender equality and inclusive decision-making processes (European Institute for Gender Equality, 2021).
Diversity	Diversity is the presence of a range of different characteristics, backgrounds, and perspectives within a group, organisation, or society. These differences can include, but are not limited to, race, ethnicity, gender, sexual orientation, age, socio-economic status, physical abilities, religious beliefs, and political views (Roberson, 2006).
Inclusion	Inclusion refers to the practice of actively involving and valuing the contributions of all individuals, regardless of their differences, in decision-making processes and organisational culture. It aims to create an environment where diversity is appreciated, and everyone feels supported and respected (Mor-Barak, 2014).

B. List of Events

Name of event	Date	Speakers	Goal
<i>Bain Female Mentorship Program</i>	2022	Different partners, managing directors and consultants of Bain	The program was designed to support and encourage exceptional female students to enter a field where women are traditionally underrepresented. The goal was to inspire with personal impact stories and equip with leadership skills for personal career journey planning.
<i>Women in the energy transition: grievances and solutions</i>	5/12/22	Erik Jones, Director (RSC/EUI); Ilaria Conti, Head of Gas (FSR); Blandine Mollard, Researcher (EIGE); Colette D. Honourable, Former Commissioner at FERC, Partner (Reed Smith); Leonardo Meeus, Director (FSR)	The hybrid event aimed to address the challenges women face in the energy and climate sectors as consumers, professionals and policymakers, and to propose solutions within the energy transition framework.
<i>Is the European Green Deal gender-sensitive?</i>	8/12/22	Milan Elkerbout, Research Fellow & Head of Climate Change Programme, CEPS; Anna Gumbau, Energy and climate journalist; Joy Clancy, Emeritus Professor Energy and Gender, University of Twente; Eva Gerhards, Deputy Head of Cabinet of Commissioner Dalli; Megan Richards, Former Director of Energy Policy in DG Energy at the European Commission, Senior Visiting Fellow, German Marshall Fund; Mariëlle Feenstra, Senior Researcher Gender, Innovation and Energy Transition, TU Delft; Carmen Sanchez Guevara, Associate Professor, Universidad Politécnica de Madrid (UPM); Martin Hultman, Associate Professor, Chalmers University of Technology; Kata Túttó, Deputy mayor of Budapest, vice-chair ENVE Commission Committee of the Regions	The event sought to examine the extent to which policies under the European Green Deal are being designed and implemented with a gender-sensitive approach and how further gender and social inequalities can be mitigated.
<i>Seminar Human Capital Agenda Klimaatverandering</i>	9/12/22	Lisa Peters, journalist, podcast maker and public program moderator; Paulien Herder, full professor in Energy Systems Engineering at TU Delft; Peter Molengraaf, figurehead of the Topsector Energie; Marsha Wagner, Program Director Human Capital Agenda - Topsector Energie; Sandor Gaastra, secretary-general at Ministry of Economic Affairs and Climate; Six directors of 'hogescholen' of applied sciences	The Topsector Energie, GroenvermogenNL and Regieorgaan SIA initiated a cohesive approach for the Human Capital Agenda (HCA) Energy Transition. Stakeholders gathered in Utrecht to learn about the integrated approach.
<i>VN CSW Masterclass Community Mariëlle Feenstra</i>	13/2/23	Mariëlle Feenstra, scientific director of 75inQ, Senior Researcher Gender, Innovation and Energy Transition, TU Delft	The event was a masterclass where Mariëlle Feenstra, who participated in the United Nations in New York with the Dutch delegation to negotiate the theme "Innovation and technological change, and education in the digital age for achieving gender equality and the empowerment of all women and girls". The community of 75inQ was invited for an online meeting to discuss the subject and contribute their input.

C. Interviews Gender Experts

In this appendix, the interview questions posed to gender experts, as well as summaries of their responses, are presented. The questions and subsequent summaries provide insights into the perspectives of these experts on the issue of gender inequality, specifically within the context of Dutch energy organisations.

Name of event	Date	Speakers	Goal
<i>Masterclass for Young Professionals Gender equality in tech</i>	6/3/23	Anouk Creusen, Executive Director 75inQ, Strategic Advisor, Geologist; Robin Driessen, Project Manager Education at Erasmus Centre for Entrepreneurship; Katty Hsu, Senior Researcher and Startup Facilitator at Erasmus Centre for Entrepreneurship	The aim of this workshop, hosted by the Erasmus Centre for Entrepreneurship, is to engage all professionals, particularly the younger generation. The workshop's agenda includes drafting action points for the UN Conference and deliberating on their ramifications within the Dutch context.
<i>Equality in innovation and technology - CSW67 Side event NL Edition</i>	6/3/23	Marjolein Bot, Lead Energy & Digital at Amsterdam Economic Board; Claire Groosman, Digitalization Program Manager Topsector Energie; Queeny Rajkowski, Member of Parliament for VVD; Katty Hsu, Senior Researcher and Startup Facilitator at Erasmus Centre for Entrepreneurship; Jessica Conquet, Global Chief Information Security Officer at Randstad	During the UN Conference for Women, in collaboration with Equals, the Erasmus Centre for Entrepreneurship, the Amsterdam Economic Board, and Topsector Energie, a dialogue is fostered with pioneers in the realm of inclusive digital transition, innovation, and technology. The objective is to initiate the local Action Agenda for Gender-Inclusive Green and Digital Acceleration.
<i>Vrouwen in de energietransitie</i>	24/3/23	Ehssane Gounou, business director at Greenchoice; Irene Bronsvort from Utrecht University; Siward Zomer, cooperative director of Energie Samen	The meeting was based on the idea that energy cooperatives can be more effective if they operate from different perspectives. The goal was to find how a broader and more diverse approach that appeals to and involves more people in the energy transition can be achieved.

C.1 INTERVIEW QUESTIONS GENDER EXPERT

Background information

1. Can you describe your experience working with or consulting for organisations on issues of gender inequality?

Problem framing - personal

2. How would you define gender inequality in organisations?
3. What are the underlying causes of gender inequality in organisations?
4. Did your perception of gender inequality change since you started working (within the energy industry)?
5. Who are the key stakeholders in addressing gender inequality in organisations?
6. What are the priorities and goals that need to be addressed in order to reduce gender inequality in organisations?

Problem framing - organisations

7. In what ways do people within organisations differ in their framing of gender inequality?
8. In your opinion, should the framing of gender inequality within organisations be changed? Why or why not?
9. How do you think the energy transition is influencing gender inequality?

Relationship of problem framing and interventions

10. How might interventions affect the way gender inequality is perceived in organisations? Or the other way around?

Concluding advice

11. What advice would you give to organisations that want to create a more inclusive and equitable workplace for people of all genders?

C.2 INTERVIEW SUMMARIES GENDER EXPERTS

Expert 1

The interviewee is the social impact manager in a corporate social affairs team focused on stakeholder engagement. They have spent the last 15 years working on diversity and inclusion initiatives within the organisation. They were initially reluctant to join the company because they felt it was too homogeneous, with mostly white men over 50 with technical backgrounds. They eventually joined the team and have since focused on creating space for different perspectives and making the organisation more inclusive and equitable in its design of energy systems.

The interviewee discussed the importance of diversity both in the company and in decision-making processes. The interviewee emphasises that having diversity within the company allows a representative from the outside world to have a voice in the organisation. They argue that having a representative from different groups, such as those from lower social classes, bi-cultural talents and women, can bring a broader perspective to the decision-making table. The interviewee mentions that when she first joined the energy company, there was very little diversity and she struggled with gender stereotypes. However, over time things have improved and more women are now working in the company. However, the interviewee believes that more needs to be done, particularly in areas such as technology, where there are still very few women. They argue that the perception of technology as a 'boys' thing' has contributed to the lack of diversity and suggest that involving more women in the design and development of technology could lead to more inclusive and innovative solutions.

The interviewee talked about the interventions her company has made, such as portraying women in their job advertisements and writing gender-neutral job descriptions to make their workplace welcoming to women. In addition, they consider factors such as the design of their building, the food in their canteen and the language to create a favourable working environment for women. The interviewee explained the importance of allowing opposing viewpoints and seeing them as an opportunity for growth, and noted how inclusive behaviour by a manager can set an example for employees. The interviewee also emphasised the importance of role models for women.

In the interview, the interviewee discussed the stages of diversity and inclusion within their organisation. Initially, they focused on attracting and retaining women in technical roles. However, they eventually realised the importance of inclusivity for both genders and promoting inclusive leadership. They recognised the challenges of achieving a 50/50 gender balance in technical roles due to the limited pool of technically qualified women.

They also mentioned the importance of creating an organisational culture of gender equality. The interviewee reflected on the progress that has been made in terms of gender equality but noted that there is still work to be done due to historical cultural biases against women. They highlighted the issue of gender-based assumptions in organisational culture, particularly in male-dominated companies. The interviewees mentioned that culture is determined by the majority.

Next, the interviewee talks about the impact that visibility has on the evaluation of performance in the company. They mention that at the end of each year there are performance review meetings where visibility and exposure of a person's projects play a significant role in how well they are rated. The interviewee notes that women tend to be less concerned with visibility and more focused on doing a good job, which can result in them being seen as less qualitatively good. The interviewee explains that the process has already been changed on paper, but cultural factors make it difficult to change individual perspectives. The interviewee also notes that people of colour face additional challenges in being visible and that cultural and cognitive factors make it difficult to change the evaluation process. They suggest that having more women and people of colour in leadership positions could help change cultural perceptions over time. They mention a podcast discussing the repeal of a law that made women legally incompetent if they were married, and how some women were able to work and buy things without a man's permission. However, the interviewee notes that only the progressive women took advantage of their new rights because culture is deeply ingrained, and people tend to follow the examples set by their parents.

Finally, the interviewee mentions paternity leave as an issue of payment, as only those with higher salaries can afford to take leave, as the 70% pay is not enough for those in lower income brackets. This leads to a situation where men continue to be the main breadwinners and women have to stay at home to look after the children. The interviewee hopes that men will take paternity leave so that the distribution of work and care at home can be more balanced. They also advocate 100% pay for parental leave.

Expert 2

The interviewee is a leadership coach for professional women and previously worked for a large Dutch energy company for six years. They have spent the last 15 years running group programmes in organisations and are currently running a programme that combines both feminine and masculine leadership traits. They believe that diversity is not just about having men in skirts, but rather a balance of feminine and masculine qualities in leaders. They want the leaders of the future to have a healthy balance of both.

When asked if feminine or masculine traits can be taught, the respondents say that they can be taught, but some people may never excel at them. They think that learning can happen in a group setting with immediate feedback. The interviewee believes that the imbalance between masculine and feminine traits has led to inequality and that society values productivity and profit over the long-term, creative and collaborative aspects. The interviewee believes that balance is healthy for individuals and society. They believe that the imbalance between masculine and feminine traits is culturally embedded in us.

The interviewee discusses how in the past men were told to 'man up' and not show emotion, resulting in both men and women being forced into certain roles. In organisations, the male 'shell' was rewarded with leadership positions, leading women to adopt these behaviours and even sensitive men to conform to this model. The interviewee believes that men are in a bigger emotional prison than women in Western culture, even though they do not face the same financial limitations. They go on to discuss how lifting men out of this limited perspective can allow them to connect with the healthy and natural masculine and feminine energy, allowing them to be authentic while still being assertive. The interviewee also shares how talking to successful women who weren't held back helped them realize that these women were showing up from a healthy, natural balance of masculine and feminine energy. When asked if change within an organisation is necessary for this to work, the interviewee suggests that it is not always necessary as some individuals can still show up authentically within a limiting system. The influence of balanced parenting is mentioned.

The interviewee discusses how individuals adapt to the culture of their workplace. They explain that a man may become more feminine in a female-dominated department, while a woman may become more masculine in a more masculine culture. This may happen consciously or unconsciously as they move up in the organisation.

When asked if energy companies pay more attention to inclusiveness than other companies, the interviewee said they can't comment as most of their clients are either in the energy or IT sector. However, they believe that all organisations are becoming more aware of the importance of inclusion, as true diversity is not just about having different people, but also including their voices. They also mention the 'war for talent' and how organisations need to adapt to attract the brightest and the best, which is why they are paying more attention to inclusion.

The interviewees discuss the importance of psychological safety in creating innovative and productive teams. They believe that the organisations of the future will prioritize values beyond profit, including positive impact on the planet and contribution to society. The interviewee also mentions that some individuals may resist change, but they are the "dinosaurs" that will become extinct in the future.

In conclusion, the interviewee believes that women have an opportunity to lower their weapons and not be as prejudiced as they perceive others to be. They acknowledge the importance of previous generations of women who have paved the way for them, but also believe that the younger generation is already better at embracing both natural masculine and feminine qualities. They suggest that by letting down the armour a little, women may find that there is much less resistance than they expect. While some people may still be shaped by a culture that has rewarded certain behaviours, they believe that the younger generation deserves a chance to show that they are ready for change.

Expert 3

The interviewee holds a position as Chairman of the Board and is a member of the Supervisory Board of several companies. In the interview, the interviewee discusses their interest in gender equality and the importance of treating individuals equally while providing opportunities to excel. They mention their involvement in promoting gender diversity in leadership positions and representing the Netherlands in a forum on women's empowerment. The interviewee also highlights the shift towards equity in HR practices, where individuals are not treated as a uniform group, but are given personalised support to help them excel. They give an example of how giving the same fruit to two people with different needs does not necessarily help them equally, illustrating the concept of equity.

The interviewee discusses how companies have used globalisation and standardisation to create a uniform environment where people no longer have their own identity or workspace. They argue that people now have a desire for individuality and a sense of identity, which has been lost due to cost-cutting measures taken by companies. This has had a negative impact on corporate culture. They note that personal values and beliefs are becoming more important, and that people do not want to work for companies whose values do not match their own.

The interviewee explains that the lack of attention given to women's unique perspectives and characteristics in male-dominated industries has made it difficult to bring about change, as everyone is brought up with a certain bias. They mention that addressing bias and being willing to listen to and act on feedback from diverse perspectives are important leadership qualities needed to achieve true diversity and inclusivity in organisations. They also note that senior leaders often have lower emotional intelligence, which can hinder progress towards these goals.

The interviewee discusses the challenges women face in their careers. They mention a study on the "tallest poppy syndrome", where women are often held back because they are different from the norm. They also talk about another study by Danielle Li, where women are often judged more critically than men and have fewer opportunities for promotion. They explain that young women often don't recognise these problems and are optimistic about their future until they face the limitations imposed by their employers. Women are often asked questions and conclusions are drawn about them that are not asked of men. These conclusions can limit a woman's potential and affect her career progression.

The interviewee discusses the older generation's preference for tangible objects over virtual ones, citing the generation's familiarity with them. They also discuss the social and cultural implications of part-time work in the Netherlands, including the history of its introduction and its impact on women's financial independence. They stress the need to improve productivity and address the issue of women's financial dependence, which is still prevalent today. The interviewee notes that younger generations may not fully understand the importance of these issues as they tend to work on the basis of equality.

When asked about the impact of the energy transition, they mention the need for leaders to adapt to the changing world in general. They suggest that leaders should use both masculine and feminine qualities, such as empathy and situational awareness, to effectively lead their teams through change. When asked if these skills can be learned, they suggest that it is a combination of innate qualities and deliberate self-reflection.

The interviewee expresses frustration at the rise of diversity experts who lack proper training and experience. They argue that women who have not reached the top should not be advising others on how to succeed. The interviewee believes that while education can be valuable in promoting diversity, it is also important for individuals to be true to themselves and not conform to male norms. With regard to diversity training, the interviewee sees it as 'window dressing' and believes that real change needs to come from the top down, with senior management leading by example and engaging in meaningful conversations with employees. They argue that diversity is an important aspect of business sustainability and should be a priority for senior management.

In conclusion, the interviewee emphasises the importance of recognising the different dimensions of diversity, not just generational, gender, LGBTQ+ and disability differences, but also cultural and environmental differences. They suggest that it is difficult to generalise as a company and that it is important to make a moment-by-moment assessment of what is happening.

Expert 4

The interviewee is an expert on gender and identity who works as a journalist, writer and consultant to companies on diversity and inclusion. They acknowledge diversity and inclusion are broader than gender, but gender inequality is the most persistent form in society. They argue that gender inequality in Dutch energy organisations stems from a narrow definition of success based largely on masculine values, with a business model from the 1950s when men were considered breadwinners and women housewives.

The interviewee believes that the current business model, with its focus on efficiency and short-term profits, has not adapted to societal changes, including the increased participation of women in the workforce. The masculine values associated with success in this model, such as ambition, competitiveness and a hierarchical mindset, are often perceived negatively when exhibited by women, leading to gender inequality within organisations.

According to the interviewee, the solution to this problem cannot be the responsibility of individual companies alone, as this would weaken their competitive position. Instead, they suggest that companies should work together within an ecosystem, possibly with government support, to develop a new business model that is more inclusive and focused on long-term well-being rather than short-term profit.

The interviewee acknowledges that there is still a lack of awareness of the root causes of gender inequality in organisations. While people may recognize that there is a problem, they are often unaware of the underlying norms that perpetuate it. The interviewee's work involves challenging these norms and raising awareness of the need for a more inclusive business model and definition of success.

The interviewee discussed the first generation of women who paved the way in breaking through gender barriers in organisations. These pioneering women often made significant personal sacrifices, such as limiting their family size or altering their personalities, to succeed in male-dominated environments. The interviewee observed a generational divide for both men and women, with older individuals often finding it challenging to understand and accept the younger generation's values. They mentioned that women who made sacrifices to succeed in their careers might find it difficult to acknowledge the need for systemic change, as it would involve recognizing the personal compromises they have made. The interviewee discussed how younger people could improve gender equality as their careers progress. However, they argued that these individuals would still be operating within a system that requires certain financial outcomes to keep companies afloat, which can limit their ability to promote diversity, autonomy and flexibility. They believe that a broader societal change is needed, requiring a shift in our understanding of success and happiness.

The interviewee also mentioned that while some organisations are trying to implement systematic changes to reduce gender bias in appraisals, individual appraisals often remain subjective and unequal. They also pointed out that stress in the workplace can exacerbate bias, as people tend to use familiar and safe options when under pressure. They acknowledged that although training is available to raise awareness of gender bias, it is often inadequate and not delivered frequently enough to have a lasting impact. A significant challenge is that humans are inherently biased, and any system designed to replace human judgement would still be created by humans with their own biases.

Finally, the interviewee emphasized the importance of broadening societal norms and expectations in order to effectively address gender inequality. They acknowledged the potential benefits of bias training and system redesign but argued that these measures alone were not sufficient to achieve the level of change needed to fully address gender inequality in organisations.

Expert 5

The interviewee is the Associate Director of a women's centre at a university, a centre dedicated to achieving equal power and influence for women. The interviewee works to address systemic inequalities between men and women in terms of power and influence. The aim of the centre was initially to help individual women, with a focus on women in middle management, to develop cultural awareness of unconscious bias, but now it is to build a coalition of women who can work together to change the system. This shift includes focusing on women as change agents to create an inclusive climate for everyone, not just other women. The interviewee also noted that having more women in organisations is beneficial, not only for the organisations, but also for creating a faster and more stable energy transition.

The interviewee discussed changes in corporate culture, particularly around diversity, equity and inclusion (DE&I). They noted that the biggest challenge for companies is the commercial viability of initiatives, as it is difficult to predict the return on investment for projects that span five to ten years. The interviewee emphasised that most organisations struggle to adequately manage the change required to successfully implement long-term initiatives.

The interviewee discussed how gender bias through socialisation and the use of stereotypical feminine attributes can influence stakeholder participation in the energy landscape. They noted that women are generally more likely to be collaborative, while men are more likely to be competitive. In addition, they discussed research suggesting that women are more effective in negotiations when they combine warm engagement with a frame that shows how a change or resource will benefit others. On the other hand, counter-stereotypical behaviour, such as being assertive, provokes a backlash.

When asked where the interviewee thought this came from, the interviewee discussed that it was part of the socialisation process where boys and young men are encouraged to compete and be assertive about their needs. On the other hand, girls and young women are assumed to have a caring role and are socialised not to be assertive and to take care of others' needs. This is seen in the workplace, where men who are fathers are seen as more competent, promoted and offered more money than men who are not fathers, while women who are not mothers are seen as more competent, promoted and offered more money than women who are mothers.

The interviewee discusses the impact of gender bias on the energy industry and the challenges women face in obtaining leadership roles. She notes that men are predominantly in leadership positions, but the transition to a decentralised and democratised energy landscape requires new relationships and collaborations. Women are more represented in collaborative and stakeholder roles, but organisational leadership needs to actively work on inclusive leadership to create a more level playing field.

The interviewee also notes the challenges of addressing gender bias, particularly in data-driven organisations. These organisations may think their processes are objective, but their decision-making processes can be subjective and biased. The author identifies four patterns of gender bias, one of which is the tug of war where women do not support another woman in their organisation in which men dominate, especially when they see the other woman taking a different approach to coping with the male-dominated environment. The interviewee recognises the need for space for authenticity.

Finally, the interviewee says that women are often promoted on the basis of performance, while men are promoted on the basis of potential, which leads to women working harder to be perfect and not having the visibility that men have.

Expert 6

The interviewee has worked in the Human Resources department of a Dutch energy company for more than 20 years. They are partly responsible for D&I in the sense of maintaining a network of diversity and inclusion teams within the company. The interviewee notes that gender inequality is an ongoing challenge, especially in a technical company. They emphasize that the issue goes beyond gender to include the inclusion of different groups, such as people with disabilities and the LGBTQ+ community. However, the interviewee emphasizes that gender balance remains a significant challenge, particularly in certain technical roles where it can be difficult to recruit women.

The interviewee has seen some changes in gender inequality over her 20 years at the company, but progress has been slow, and the culture remains technically male-dominated. Diversity has been a core value of the company since its inception. There are numerous initiatives in place to promote diversity and inclusion, such as targets for hiring diverse talent, succession planning, unconscious bias training and creating inclusive work environments. Despite these efforts, the gender balance has not yet reached the desired level.

The interviewee believes that there is no single solution to gender inequality. Rather, it is the sum of many factors, such as candidate selection, company culture, leadership and support for diversity programmes and events. Although some organisations are more successful in addressing gender inequality, the interviewee suggests that their success is likely due to a combination of many actions taken by these companies.

The interviewee discussed how gender inequality is present in organisations at different levels. They explained that it is not only in leadership positions, which are often held by men, or in vision statements, but also within the workforce itself. They mentioned that the organisation is working to address this issue at different levels, focusing on supervisory positions where men and women lead operational teams. The interviewee discusses the challenge of balancing business needs with the pursuit of gender equality. They note that while it may be ideal to wait for female talent, operational pressures sometimes lead teams to choose readily available male candidates. The interviewee acknowledges that this wicked problem is made up of many small factors, but also highlights the successes of her organisation, such as the presence of networks and increased attention to the issue.

The interviewee acknowledged that the organisation does not have gender inequality in terms of working conditions or provisions, but rather in the proportions of male and female workers and to some extent in career opportunities. They also mentioned that certain disciplines might have a different balance.

The conversation shifted to the topic of the energy transition and how it might affect the organisation's approach to diversity. They mentioned that the energy transition might require different types of talent and might create opportunities for more diverse teams. They noted that there was a relatively high intake of female talent in teams working on sustainable, more societal projects, which could help to increase diversity within the organisation. However, they also emphasised that the organisation's primary focus remains on traditional oil and gas operations.

Finally, the interviewee acknowledges that significant change can take time, likening it to a slow-moving oil tanker. They mention that the organisation deliberately pushes and pulls towards change, sometimes setting seemingly unrealistic targets to stimulate necessary discussions and drive progress. The interviewee notes that perceptions of gender inequality within the company can vary greatly depending on who is asked. Some individuals in traditionally male-dominated roles may feel that women are increasingly being prioritized, while others in more diverse working environments may not share this view. The interviewee acknowledges that the company's culture has historically been male-dominated but points out that it has evolved over the past 20 years. They believe that while the company's values have remained consistent, employees are now more likely to embrace them rather than see them as imposed.

D. Survey Questions

You are invited to participate in a survey on gender and Dutch energy organisations. This survey is being conducted as part of the Master's thesis on gender and organisations of Kirsten Mallant, who is studying Management of Technology at the TU Delft.

The aim of this survey is to explore four areas of gender inequality (individual, organisational and societal) in Dutch energy organisations, to better design inclusive interventions. The survey includes a series of questions related to your general perception and personal experiences of gender and organisations. The questions are in English, but you are welcome to respond in Dutch if you prefer.

Participation in the survey is completely voluntary. Your responses will be used for research purposes only and will be kept confidential. No personal information such as your name, company name, or any other identifying information will be shared or published.

The survey should take approximately 5 minutes to complete.

Thank you for your time and participation.

- What type of organisation do you currently work for?
 - » Large corporation
 - » Small to medium-sized business
 - » Start-up
 - » Non-profit organisation
 - » Government organisation
 - » Self-employed/entrepreneur
 - » Freelance/contract worker
 - » Other:
- What is your job title or position within your organisation? Executive (CEO, CFO, CTO, etc.)
 - » Senior Manager (VP, Director, Manager, etc.)
 - » Middle Manager (Supervisor, Team Leader, etc.)
 - » Entry-level Employee (Associate, Coordinator, etc.)
 - » Specialist (Analyst, Consultant, etc.)
 - » Human Resources (HR) or Talent Acquisition
 - » Administrative or Support Staff (Assistant, Receptionist, etc.)
 - » Trainee (Intern, Apprentice, etc.)
 - » Other:
- How many years of experience do you have working in the energy industry?
 - » Less than 1 year
 - » 1-5 years
 - » 5-10 years
 - » 10-20 years
 - » 20-30 years
 - » More than 30 years
 - » None
- What is your gender?
 - » Female
 - » Male
 - » Non-binary
 - » Prefer not to say
 - » Other:
- To what extent do you agree with the following statements:
 - o All genders have equal opportunities in organisations.
 - Please provide a short explanation for your agreement/ disagreement/ neutral response.
 - o People of different genders have different skill sets.
 - Please provide a short explanation for your agreement/ disagreement/ neutral response.
 - o Gender inequality in organisations is caused by individuals having gender-related biases.

- Please provide a short explanation for your agreement/ disagreement/ neutral response.
 - o All genders have equal opportunities in organisations if they are competent.
 - Please provide a short explanation for your agreement/ disagreement/ neutral response.
 - o Gender inequality in organisations is caused by organisational processes and policies that advantage one gender over another.
 - Please provide a short explanation for your agreement/ disagreement/ neutral response.
 - o Gender inequality in organisations is a result of society that associates certain traits and roles with a certain gender.
 - Please provide a short explanation for your agreement/ disagreement/ neutral response.
- To what extent do you agree with the following statements:
 - o Society needs to address gender inequality in organisations.
 - Why do you agree/disagree/feel neutral about this statement?
 - o Individuals need to be educated to address gender inequality in organisations.
 - Why do you agree/disagree/feel neutral about this statement?
 - o Organisations need to implement policies and practices to address gender inequality.
 - Why do you agree/disagree/feel neutral about this statement?
 - Who do you think is primarily responsible for solving gender inequality in organisations?
 - » Government or legislative bodies
 - » Church
 - » Parents
 - » Human Resources
 - » Schools
 - » Individual employees
 - » Company leadership
 - » Diversity committees
 - » Nobody
 - » Other:
 - Did your perception of gender inequality change since you started working for your organisation?
 - How has working for your organisation impacted your perception of gender inequality?
 - Have you ever experienced any unfair or different treatment related to your gender identity in your organisation?
 - How did this experience impact you personally?
 - » Positively
 - » Negatively
 - » Neutral
 - Please describe the situation(s) where you experienced an unfair or different treatment related to your gender identity in your organisation.
 - Would you be willing to participate in a follow-up interview to further elaborate on your survey responses and share your perspectives on gender inequality in general and your organisation?

All interview data will be anonymized, meaning that your name, organisation and other identifying information will not be included in any reports or publications resulting from the study.

E. Interviews Employees

In this appendix, the interview questions posed to employees, as well as summaries of their responses, are presented. The questions and subsequent summaries provide insights into the perspectives of these employees on the issue of gender inequality, specifically within the context of Dutch energy organisations.

E.1 INTERVIEW QUESTIONS EMPLOYEES

Background information

1. Which Dutch energy organisation do you work for?
2. Could you tell me a bit about your role and responsibilities within your organisation?
3. What kind of experience do you have working in Dutch energy organisations prior to your current role?

Gender inequality explanations

4. Can you share any experiences or observations you've had regarding gender inequality in your organisation?
5. What do you think are the underlying causes of gender inequality in your organisation?
6. How would you suggest addressing or improving the current situation regarding gender inequality?
7. How are these thoughts and perceptions different for the Dutch energy industry?
8. How would you describe the organisational culture of your company, and what do you think has influenced it?
9. When you first joined the company, did your expectations of the organisational culture align with what you experienced?
10. Have you observed any notable differences in the behaviours of various groups within the company, such as between different generations or other demographic distinctions?

Energy transition

11. How do you believe the ongoing energy transition is impacting gender inequality within Dutch energy organisations?

Intersectionality

12. How do you think the intersectionality of gender with other factors such as race, ethnicity, and sexuality affects experiences of gender inequality in the workplace?

E.2 INTERVIEW SUMMARIES EMPLOYEES

Employee 1

The interviewee has a degree in Electrical and Innovation Sciences, with a second Masters in Sustainable Energy Technologies. She works for a network management company as an energy transition consultant. In this role, she engages with customers and stakeholders to identify barriers to the energy transition and determine what actions the company should take to support, rather than hinder, the transition. The interviewee has been in this position for almost a year but has held other roles within the company for a total of four years.

In the interview, the interviewee discusses her experiences the organisation and highlights the perceived gender inequality that exists within the company. She mentions that certain types of personalities, often associated with masculine traits, are more likely to be in higher positions and that feminine traits are generally less valued. The interviewee believes that the company's history as a technical organisation contributes to this culture, as technical fields have traditionally been dominated by men.

The interviewee mentions various initiatives that have been attempted to address gender inequality within the organisation. One example is a women's network with an unfortunate title that seemed to perpetuate stereotypes about women. She believes that an increase in the number of women in the organisation and a reevaluation of female attributes could help change the culture. However, she also emphasises that this change needs to come from everyone in the organisation, not just a select few.

When discussing the challenges faced by women in the workplace, the interviewee mentioned incidents of being treated like a secretary, being asked about her plans for motherhood and experiencing microaggressions. She finds it difficult to discuss these issues with colleagues for fear of being seen as complaining or perpetuating gender stereotypes. This fear is also confirmed in conversations through personal reactions to pointing out a systemic problem or arguments about the need to fix the women rather than the behaviour. The interviewee believes that having regular conversations about this issue and providing training on recognising microaggressions could help to create a more inclusive and supportive environment within the organisation. She also highlights the importance of having role models and representation in leadership positions for women to look up to and learn from. This is not currently the case and is a challenge to her career ambitions. Her colleagues suggest that the interviewee could be the first example of change, but this puts a lot of responsibility on her shoulders.

The interviewee acknowledges that the issue of gender inequality is not unique to her organisation or the energy sector, but is a wider societal problem, as recognised by her former peers working in different organisations.

The interviewee sees the energy transition as an opportunity to reduce gender differences within the organisation. She argues that both male and female traits are necessary for a successful transition, as it requires a diverse set of skills and competencies. For example, she mentions that female traits such as creativity, consensus building, networking and caring are crucial in managing complex transitions. At the same time, traditionally masculine traits such as delivering concrete results, taking tough decisions and being tough are essential to make progress and avoid stagnation.

However, the respondent does not believe that leadership roles within her organisation currently recognise the importance of these diverse characteristics. It is vital that leadership roles within organisations recognise the need for both traditionally male and female attributes and promote a more inclusive and balanced working environment. By embracing gender diversity and fostering a culture that values all attributes, Dutch energy organisations can better navigate the complexities of the energy transition and work towards a more sustainable future.

Employee 2

The interviewee is a project manager at a large refinery in the Netherlands with over ten years' experience. He has observed that achieving gender balance in energy organisations, especially in the manufacturing sector, can be quite challenging due to the limited number of women in the industry.

The main reason for this imbalance, according to the interviewee, is the low supply of women in technical fields, especially in middle vocational education (MBO) and higher vocational education (HBO). In his view, a strong foundation is essential for sustainable gender equality within an organisation. While it is commendable to have women in top leadership positions, he argues that it is crucial to address gender imbalances at lower levels as well. This is because the foundation of an organisation is built on these lower levels and if they are not balanced, the whole organisation risks being unstable. The interviewee also points out that cultural factors within the sector and companies contribute to gender inequality, which can be likened to behaviour such as whistling at passers-by. He acknowledges that these attitudes exist to some extent within his organisation and within the energy sector.

The interviewee points out that his organisation has made significant efforts to address gender imbalance, including the establishment of a Gender Balance Network, for which the interviewee is an ambassador. One of the aims of this network is to raise awareness and make it more acceptable for men to take parental leave. The interviewee notes that changes in social attitudes, such as the recent introduction of eight weeks' paternity leave in the Netherlands, will help to bridge the gender gap in the workplace.

The interviewee believes that achieving gender equality in the workplace requires efforts from both society and business. While companies can create networks and groups to promote change, a broader societal shift is needed to truly influence the mindset of employees.

The interviewee also noted that the energy transition goals are linked to the issue of gender inequality. He argues that the complex challenges facing the industry require diverse perspectives and skills. The interviewee emphasises that a balanced workforce, including a mix of younger and more diverse individuals, is essential to the success of any business. The most fundamental aspect of diversity, according to the interviewee, is achieving a balance between men and women in the workplace.

He mentions that his organisation has made significant progress in the last 10 years, both in terms of internal culture and corporate vision, in line with the 2030 and 2050 goals. Proper communication and planning are crucial, especially in larger companies where it should not be a problem to accommodate, for example, parental leave. However, the interviewee recognises that this may be more challenging for smaller and medium-sized energy companies, where the absence of a single employee can have a greater impact on the workforce.

The interviewee emphasises the need for continued efforts to address gender inequality in Dutch energy organisations, stressing the importance of societal change and collaboration between men and women to create a more inclusive and diverse industry. The interviewee highlighted the paradoxical nature of addressing gender inequality in the sector. He emphasised that men are needed to drive change towards gender balance, as they can help convince other men of the existence of an imbalance.

Employee 3

The interviewee has extensive experience in the energy sector, having worked for a number of companies, including a major oil and gas service company and various major energy organisations, for a total of around 30 years. She has moved from oil and gas development to renewable energy. She is currently moving to another energy company where she will be taking on a more senior role. As she transitions into her new role, the interviewee hopes to have more opportunities to progress and have a greater impact on the energy transition.

During her time at the large energy company, the interviewee noticed a shift in the corporate culture towards renewable energy, but also an influx of people who were more focused on career advancement than passion for the sustainable cause. This created a more politically charged atmosphere, which influenced her decision to leave the company.

The interviewee has worked with different companies and experienced different cultures within them. She emphasised that as a young engineer starting out, her focus was on work, which may have influenced her perception. She mentioned that when she worked in a company based in France, the culture was not necessarily based on gender, but rather on nationality. She also discussed her experiences in another company where the culture was changing due to the relocation of the headquarters and changes in the values emphasised by the current CEO. She noted that the company's top-level appointments were now mostly from non-Dutch backgrounds, reflecting the ongoing cultural change. The interviewee suggested that the lack of diversity is perpetuated by those in power appointing others who are like themselves.

The interviewee believes that although there are an increasing number of women in senior positions within the large energy organisation, they are mostly in finance or HR roles, with few in technical positions. She also observed that women in these positions tended to adopt traditionally masculine characteristics in order to advance their careers. The interviewee believed that this was due to a corporate culture that valued and rewarded masculine attributes more. This resulted in a lack of recognition for women with different leadership styles or characteristics. The interviewee had experienced instances where she was not promoted because she was not part of the inner circle of male colleagues.

However, the interviewee believes that while statistics and targets for gender diversity are a good first step, they are not enough to bring about meaningful change in corporate culture. She argues that many women still do not see themselves in top positions due to a lack of relatable role models, which may discourage them from pursuing leadership roles. She has had positive experiences with a few female mentors in the large energy company, one of whom is considered great for her balanced leadership style and strong team management skills. When asked about the prospect of change within the company, the interviewee expressed scepticism, stating that she does not believe there was an awareness that change was necessary for the company to function better.

The interviewee emphasises the need for organisations to value and appreciate the unique characteristics and strengths that women bring to leadership positions. This could lead to a more inclusive environment that encourages women to stay and thrive in the energy sector. Although there is no 'silver bullet' solution, she believes that small steps towards recognising and encouraging diverse leadership styles can ultimately make a significant difference.

Employee 4

The interviewee has extensive experience in the energy industry, having worked for a large international energy company for 12 years before joining a smaller Dutch energy company ten years ago. When comparing the working environments of the large international energy company and the smaller Dutch company, he noted some significant differences. The smaller company has a more intimate atmosphere where everyone knows each other, which leads to shorter lines of communication and faster decision-making. On the other hand, the larger company is more bureaucratic with longer decision-making processes.

In terms of gender inequality, the interviewee noted that it was more of an issue in his previous company than in his current one. In his current company, the focus is on hiring the best person for the job, regardless of gender. However, in his former company there seemed to be more emphasis on increasing the proportion of women in the company.

The interviewee mentioned that he had not experienced gender inequality in terms of opportunities, promotions or salaries in either company. However, that for the big company he did not have the oversight whether this took place or not. He currently considers diversity during the recruitment process but does not have specific quotas to meet. The interviewee acknowledged that there is probably always some bias in the recruitment process as people tend to prefer to work with those they know and bringing someone different into the team can be seen as a risk. He believes that the company's perspective on parental leave is the same for men and women. However, he also noted that employees may be disappointed to lose a good colleague for an extended period of time due to parental leave, regardless of the person's gender.

The interviewee mentioned that his perspective on gender inequality had evolved over time. He did not observe any inequality in terms of opportunities for men and women, and sometimes saw men having fewer opportunities due to the pressure to balance the number of positions held by both sexes. He emphasised that there was no policy in his current company that actively excluded or included candidates on the basis of their background or characteristics. However, even though no formal policy is in place, diversity is valued and taken along as a soft metric for candidates of equal strength.

Regarding the energy transition and its impact on the company, the interviewee is responsible for environmental, social and governance (ESG) issues. He believes that the needs of the energy transition are well matched by the type of people they are looking for, such as entrepreneurial, versatile and passionate.

The interviewee acknowledged that there is a certain male-dominated culture in large energy companies, which may influence whether women want to work there. This could be due to the image of the fossil fuel industry and the need to compete in such an environment. The interviewee also noted that the direct and straightforward communication style in the Dutch work culture might not be comfortable for other nationalities, including men and women, and might be perceived differently compared to other countries.

Employee 5

The interviewee, with 18 years of experience in the energy sector, currently works as an account manager for a Dutch energy organisation. Previously, she worked for a subsidiary that was involved in the certification of sustainably produced energy and for a short time in a consultancy firm.

She describes the culture in her present company as a predominantly male-oriented, technical environment. She notes that the organisation is heavily influenced by older employees who have been in the same positions for many years. In contrast to her experience at the previous company, the interviewee feels that in her current role she is taken less seriously and has to prove herself more. She believes that this may be due to the low percentage of women in certain roles, which results in women feeling the need to prove themselves more than their male counterparts. The interviewee also mentioned that the industry has a male-dominated work culture, which can overshadow the unique qualities that women bring to the workplace. She attributes this to historical norms and the way work has traditionally been structured.

She believes that the culture in other energy companies may be different depending on the focus of the business and the location. For example, she mentions that offices in Amsterdam and Delft may have a more dynamic and diverse environment due to a higher proportion of younger employees and a more inclusive culture. She believes that the focus on technical aspects contributes to gender inequality, as women are often perceived as less knowledgeable in this area. This in turn can lead to less diversity and dynamism in the workplace.

The interviewee highlights the need for structural changes within the organisation to promote gender equality. She suggests that employees should change roles more frequently, every 3 to 5 years, to foster new insights and a more inclusive culture. This would require a deeper change in the organisation's mindset and approach to career development.

She notes that while there is an intention to promote gender equality within the organisation, real change is difficult to achieve without significant structural adjustments. She mentions that the organisation recognises the need for a more equal gender distribution but may not fully recognise the unique benefits and competencies that women can bring to the table. As a result, women may not be valued for their specific contributions and may feel the need to adopt a more masculine approach in order to fit in.

The interviewee also discusses the influence of societal norms and expectations on gender inequality in the energy sector. She mentions that women in technical roles are often perceived as less knowledgeable or experienced due to a male-dominated culture. This perception can lead to women having to work harder to prove themselves in their roles.

She believes that the energy transition could benefit from a more diverse and inclusive workforce, where different skills are recognised and valued. She believes that the current male-dominated norms in the workplace need to be challenged and re-evaluated in order to create an environment that is more inclusive and innovative.

Finally, she stresses the importance of addressing the root causes of gender inequality in Dutch energy organisations. The interviewee emphasises the need for structural and cultural change. By encouraging role changes, fostering a diverse workforce and re-evaluating male-oriented norms in the workplace, organisations can create a more inclusive and innovative environment. Recognising and valuing the unique contributions and skills of all employees, regardless of gender, will be crucial to progress and success in the energy sector.

Employee 6

The interviewee is an HR connector in a Dutch energy company, responsible for a business unit within the organisation that focuses on asset operations. This unit deals with various aspects of energy production and processing, including the management of offshore wind farms, power plants and gas storage facilities in Germany. The unit employs around 800 FTE, and the company has around 3,000 employees in total.

The interviewee described the culture as one driven by a passion for sustainable energy and technology. The company attracts employees who are intrinsically motivated and provides opportunities for personal growth. In recent years, the company has implemented a diversity and inclusion programme, with a focus on achieving a more balanced gender representation in leadership roles. Although he does not have quotas, he has set targets and actively seeks out female candidates for more senior positions.

The interviewee acknowledges that there is a need for such measures as people tend to hire others like themselves and there are more men in technical fields and at higher levels. Efforts are made to attract and promote women within the company, but the interviewee admits that this can be challenging due to the significantly higher number of male candidates in technical roles. In his own business unit, around 40% of management roles are held by women, but this drops to around 2% in technical roles such as technicians and engineers. In other areas of the business, such as the call centre, women make up around 80-90% of the workforce.

The interviewee notes that the culture in different parts of the company can be very different, with a more male-dominated atmosphere among technicians and engineers, and a greater female presence in areas such as HR. The interviewee shared that in his HR team there is more room for vulnerability and open expression of feelings, thoughts and personal issues. The interviewee noted that there is often a difference in the gender ratio between MBO and HBO teams, but he cannot pinpoint the exact reason for this. He also mentions that there is a difference in culture between head office and the field, with the latter experiencing more diversity in terms of nationality and a less sensitive atmosphere. Issues that might be sensitive at head office are often discussed in jokes in the field, which seems to make the problems less complicated.

In terms of gender inequality, the interviewee believes that the company's efforts to promote diversity have been effective at senior management levels, but that challenges remain in more technical roles. The interviewee believes that fewer women are attracted to technical roles, such as being a technician or working in installations, because of the nature of the work. It's not necessarily clean and requires physical effort. In addition, fewer women enrol in technical education programmes. However, the interviewee mentions that the female technicians he knows are successful in their roles.

The interviewee doesn't see a direct link between the energy transition and gender inequality. He believes that the transition will mainly take place in the technical and vocational sector (MBO), which may lead to an increase in the number of men and a decrease in the number of women working in this field. As a result, the interviewee believes that gender inequality may increase rather than decrease as a result of the energy transition.

