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Towards a gender-just energy transition in the European Union

An ecofeminist analysis of the Swedish, German, and Romanian NECPs

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Abstract

The thesis aims at answering the research question: "To what extent do the NECPs promote a gender-just energy transition in the European Union?" In order to do so a content analysis of the National Energy and Climate Plans (NECPs) of Sweden, Germany and Romania has been performed, using an ecofeminist lens. By answering the research question the thesis contributes to the debate of engendering the energy transition in the European Union (EU). Prior research has shown that environmental and energy related policies in the EU are genderblind, which reinforces existing inequalities and power structures inherent to the energy sector and environmental institutions. However, since the energy sector is responsible for over 40% of the EU's emissions, its transition towards renewable energies plays a crucial role in the mitigation of climate change. For the transition to be inclusive and beneficial for all people, energy policies like the NECPs that will be guiding the Member States energy transitions for the next decade, need to recognize gendered differences in energy access and consumption; also called the gender-energy nexus. Results show that the NECPs of the chosen countries do not include a holistic approach of sustainability and thereby limit gender equality in the energy sector. Consequently, the analyzed NECPs barely promote a gender-just transition in the European Union.

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1. Introduction

Gender equality, defined as "equal rights, responsibilities and opportunities of women and men and girls and boys" (European Institute for Gender Equality, 2022b), has become integral to achieving global sustainability. It is considered "a foundation of sustainable social-ecological systems" (Lawless et al., 2022, p.1). In fact, social-ecological systems frameworks value gender equality as "precursor to, and a product of, system sustainability." (ibid.) Sustainability paradigms like the "Doughnut for the Anthropocene", which aims at an "ecologically safe and socially just space" (Raworth, 2017, p. 48) for all consider the inclusion of gender equality as "a prerequisite for, and determinant of, social-ecological sustainability" (Lawless et al., 2022, p.1). By promoting gender equality (inter alia SDG 5) as one of the Sustainable Development Goals (SDGs) key targets, the United Nations (UN) recognizes the interconnectedness of gender and climate change and has put gender equality high on the political agenda worldwide. Gender equality also finds mentioning in other international agendas, concerned with the mitigation of climate change, like in § 45 of the 2015 Paris Agreement. It is one of the European Union's (EU) fundamental values, enshrined in the EU Treaties. Gender equality has gained even more importance due to the proclaimed "Union of equality" (European Commission, 2020) under the Von der Leyen Commission in 2020. On that account the Gender Equality Strategy (2020-2025), that includes policy objectives and actions "towards a gender-equal Europe" by 2025, was presented. By using a dual approach of gender mainstreaming and targeted actions toward women, that goal should be achieved (European Commission, n.d.-a). Even more surprising is that studies have shown the European Green Deal (EGD), considered a framework document for EU policy action to combat the climate crisis, to be genderblind (Heffernan et al., 2021; Ourkiya, 2021). Such gender blindness is problematic, as it reinforces existing inequalities and power structures (ibid.), and because many countries, even none-Member States, are taking the EU as an example for their environmental policies. And even though "gender equality is not a magic wand to solve all [...] environmental challenges, there is evidence that more gender-equal societies can also deliver better results for the environment and climate" (Heffernan et al., 2021, p. 5).

On that account, it is to mention that the definition of gender equality used in this work and the thesis itself focus mainly on the gendered inequalities between women and men, as other disaggregated data is missing. However, the thesis aligns with the non-binary view that "gender is socially constructed and that normative assumptions around gender have been used for the benefit of a few within patriarchal, (neo)colonial and capitalist structures" (Heffernan et al., 2021, p. 10). Gender is understood as "the interrelationship between someone's physical body, their identity (how they view their gender) and their social gender (the attributes society imposes). This interrelationship is dynamic as these categories are not fixed and therefore a person's gender can change" (ibid.). The theory section will provide more insight and further introduce the concept of intersectionality, which acknowledges that individuals can face various forms of oppression.

1.1 Background and Research Problem

As the energy sector is responsible for at least 40% of the emissions in the European Union, the transition towards renewable energies plays a major role in mitigating climate change (Vieira et al., 2021). Hence, the energy sector is facing the biggest transformation to achieve the EU's 2030 goals. However, since Russia's war of aggression on Ukraine in February 2022, the energy transition to renewables and the associated independence of Europe in terms of energy production has taken on a new significance in the EU (European Commission, 2022). It remains to be seen, however, whether the consequences of this event favor renewables or represent a step backward in the transitioning process.

According to Johnson et al. (2020, p.1), "energy transitions sit at the intersection between many of the UN's Sustainable Development Goals (SDGs)", including SDG 7, which aims at the access to affordable, reliable, sustainable and modern energy for all or SDG 11 that aims at taking urgent action to combat climate change and its impacts (United Nations, n.d.). To achieve an inclusive transition with affordable energy for all, socially transformative measures and the inclusion of gender equality are necessary (Ourkiya, 2021). And even though the mitigation of the climate crisis and the related energy transition are global issues, local action and nationwide implementation play a crucial role in a just transition. Global commitments to the SDGs or the universal declaration to provide sustainable energy for all (SEforALL) even require so. As the national level is considered "a suitable scale to formulate a gender just energy policy" (Feenstra, 2021, p. 25), the integrated National Energy and Climate Plans (NECPs) are of great interest for the thesis' analysis. They will guide the EU Member States' transition towards renewables for the next decade and therefore, are responsible for ensuring an inclusive, equal and sustainable transition. Consequently, the thesis poses the following research question (RQ):

RQ: *"To what extent do the NECPs promote a gender-just energy transition in the European Union?"*

When analyzing environmental and energy papers, it is important to keep in mind that climate change is gendered and "energy consumption is not gender neutral" (Clancy & Feenstra, 2019, p. 35), which makes the "energy transition [...] a feminist issue" (Wilson, 2018, p. 398). Such gendered differences, especially regarding the access to and the use of energy, constitute the core of what is called the gender-energy nexus (Feenstra, 2021). The gender-energy nexus has mostly been part of development research in the Global South (Ceceleski, 1995; Clancy, Skutsch, et al., 2002; Owusu-Manu et al., 2021). However, gender-related issues like energy poverty are also a reality in the EU. Accordingly, the interest in the gender-energy nexus and research on gender effects of energy transitions has been growing in the Global North (Clancy et al., 2017; Clancy & Feenstra, 2019; Räty & Carlsson-Kanyama, 2010).

Even though the sector of renewable energies is already more diverse than others (Johnson et al., 2020), the energy sector across all EU Member States remains under the influence of "a set of persistent gender inequalities" (Clancy & Feenstra, 2019, p. 11). Those inequalities include gender gaps in energy access, the energy labour market, energy-related education, and decision-making. The EU has a globally high energy access rate of 100% (World Bank Group, 2022). However, access cannot be equated with availability (Clancy & Feenstra, 2019). When

considering affordability, inequalities in energy access are an important factor. According to an EU-wide survey conducted by European Commission (n.d.-b), 8% of the EU population said they could not keep their home adequately warm. This situation is aggravated by rising energy prices and taxation due to energy supply shortages from Russia or due to (the generally more cost-intensive) transition to renewable energies (Crispeels et al., 2022). According to Clancy et al. (2017), the energy-poverty nexus is framed by "distinct gender characteristics" because women are generally at a higher risk of living in poverty due to income disparities. Because of their traditional role as caretakers, women often must work part-time, perform unpaid care work, and have an average of five years shorter working life than men. This can, in turn, lead to a life in poverty when being older. Since women usually live longer than men and are overrepresented in single-headed households, they are also at a higher risk of living longer in energy poverty (Clancy & Feenstra, 2019). As energy consumption differs between the genders, so do energy needs (Räty & Carlsson-Kanyama, 2010). The EU's "Just Transition" to renewable energies has the potential to address and eliminate existing inequalities by ensuring "fairness via equal distribution, full recognition of rights and labor contributions, equal participation in decision-making procedures, and equal capabilities in renewable energy outcomes" (Johnson et al., 2020, p. 2). According to Feenstra (2021, p. 83), a just energy policy must "reflect [...] the energy needs and rights of all energy users, taking into consideration the causes and effects of social inequalities".

As long as industrial capitalist countries formulate environmental and energy policies in a "gender-neutral" way, assuming "that a good policy, program or project will benefit both male and female equally in meeting their everyday needs" (Clancy & Feenstra, 2019, p. 14), gender equality in the energy sector remains limited. Energy policies that do not adopt gender approaches and neglect the fact that energy policies impact men and women differently are gender blind (ibid.). By reinforcing existing inequalities and power structures, they cause injustice and unequal access to energy efficiency policies. This, in turn, might lead to the so-called "Matthew-effect" of energy transition (Clancy & Feenstra, 2019). This effect describes the condition when those who can afford to invest in energy efficiency benefit from such policies, whereas the poor stay in energy poverty. Connected to that is also the so-called "Climate Change gap" between those who can afford a sustainable lifestyle (including renewable technologies like solar panels) and those who cannot (ibid.). Gender equality, hence, is an important factor to take into consideration to leave no one behind.

1.2. Relevance and Structure

By answering the research question, the thesis aims at contributing to the debate of engendering the energy transition in Europe through gender-just energy policies by using an intersectional non-binary ecofeminist lens and raising awareness of the problem of gender blindness. Many studies have claimed that gender-disaggregated data in the energy sector remains limited and a cohesive explanation of gendered inequalities in terms of energy use, research and policy is missing. Furthermore, most studies on the gender-energy nexus are missing an intersectional approach. And, despite the growing attention to the gender dimension of the energy transition, most environmental and energy related policies are gender blind. By performing a gender analysis of energy policies like the NECPs, this thesis aims at exploring the link between capitalist patriarchal structures and the development of gender-just energy policies to enable a truly just transition, that leaves no one behind. Instead of conducting a discourse analysis, as most gender-related studies do, this thesis performs a content-analysis, to bring in a new perspective of the approach on the gender-energy nexus of different EU Member States' energy policies. As the interest in energy research on the energy-gender nexus in the Global North is slowly emerging and the overall research on NECPs is not too extended yet, the thesis aims at contributing to raising awareness of the gendered effects of energy transition in the European Union and the need for socially transformative solutions to enable an inclusive and truly just transition. Sweden, Germany and Romania serve as example countries and a comparison might give further hinds to successful gender mainstreaming efforts in the context of gender-just energy policies.

In a first step, the intersectional non-binary ecofeminist theory approach is presented, which has been operationalized to guide the analysis. Sub-questions have been derived from the theory that guide the analysis as well. A model for the integration of gender equality in environmental policymaking will be presented by presenting the Tinkering-Tailoring-Transforming approach. The model originally comes from the gender equality policymaking but will be adapted for this work. After presenting the research design and methods and justifying the choice of data and case selection, a content analysis using the tool Atlas.ti will be performed. The results are presented for each country. And lastly, a discussion on the reality of gender-just energy policies in the European Union and the conclusion follows.

2. Theory: An ecofeminist approach

As social dimensions are increasingly recognized in climate change and energy research, the inclusion of gender equality into environmental and energy policies is a crucial aspect for a holistic approach of mitigating climate change. Many feminist theories have approached the interrelation of gender and climate change in various ways; hence a feminist theory, more precisely ecofeminism was chosen to inform this work. As Bell et al. (2020, p. 1) argue, "a feminist perspective on energy provides an important framework for understanding what keeps us stuck in unsustainable energy cultures, as well as a paradigm for designing truly just energy systems". More generally, feminist theory enables to assess the study of power beyond the focus of gendered inequalities of only women by taking a non-binary intersectional approach, which is a crucial aspect for all dimensions of energy research (ibid.)

The feminist criticism of the conceptualization of masculinity that is inherent to most feminist theories is, according to Bell et al. (2020, p. 3), "essential to achieving a just energy transition". In that context, Daggett (2018) introduces the concept of "Petro-masculinity", which focuses on the intimate relation between fossil fuel systems and the white patriarchal order. The connection between climate denial and misogyny as mutually constituted problems plays a crucial role in assessing environmental and climate policy and establishing a just transition. The concept relies on the idea of a "hegemonic masculinity" which sees masculinity as a socially constructed identity that defines masculinity in opposition to femininity and thereby creates a gender order that reinforces power relations between men and women as groups (Connell, 1990). As fossil fuel systems have become key in constructing that identity, a threatened fossil

fuel system means a threat to the white patriarchal rule. Climate denial and misogyny, hence, serve "fossil-fuelled capitalist interest", which further leads to a "hypermasculinity" (Daggett, 2018) and, as a result, hinders a socially just and sustainable energy transition. According to Connell & Messerschmidt (2005), masculinities can be understood as "configurations of practice" in that context which are linked to the extraction, production, exchange, and consumption of energy (Bell et al., 2020). Using an ecofeminist approach that is very critical of most social and political institutions and has a rather transformative claim (Lahar, 1991) seemed the most convenient approach to analyse the Member States' NECPs in regard to their economic incentives and their emphasis on gender equality.

2.1 From an essentialist binary to an intersectional non-binary ecofeminism

By combining a feminist and an ecology approach into a social theory, ecofeminists addressed the parallels between the exploitation of nature and the oppression of women caused by a patriarchal, male-dominated, and capitalist society (Lahar, 1991; Zein & Setiawan, 2019) Developing out of several social movements in the 1960s ecofeminist theory has developed various theoretical approaches. According to Herrero (2013), they can be classified into two major tendencies: Essentialism and Constructivism. Even though early ecofeminists have started with essentialist, binary views (Mies & Shiva, 1993), ecofeminist theory has shifted towards a more inclusive non-binary approach. Restoring its actuality and applicability to climate justice issues nowadays. In the report of the European Environmental Bureau (EEB) & Women Engage for a Common Future (WECF) (Heidegger et al., 2021) an intersectional non-binary ecofeminism is introduced that "problematises patriarchal, capitalist, exploitative, sexist systems and their multiple forms of oppression" (Ourkiya, 2021, p. 6). It calls for "paying equal attention to the impacts of environmental degradation on women, LGBTQ+ people, indigenous people, people with disabilities and other marginalised groups." (ibid.)

As mentioned before, the thesis aligns with the non-binary view, which sees gender as a social construct that translates traditionally socially constructed differences between men and women into inequalities and hierarchies. According to Heffernan et al. (2021, p. 5), gendered impacts of climate change are linked to "socially constructed gender roles and underlying power dynamics". Hence, the conceptualization and deconstruction of such play a crucial role in the ecofeminist theory as well. Gender roles influence career choices and, consequently, the means to invest in low-carbon solutions. They influence consumption patterns and needs, the values attached to sustainability, and the individual environmental footprint (ibid.). Furthermore, women's ability to express their energy needs and participate in decision-making at different levels of energy systems are limited by gender and social norms as well (Johnson et al., 2020). As gender is only "one of many axes of power that have an impact on the lives of groups and individuals" (Allwood, 2020, p. 176), Kaijser & Kronsell (2014) have integrated a wider notion of social equity, that includes an intersectional approach to gender. Showing that intersections of power can be found in various aspects of social categories like age, class, sexual orientation, socio-economic status, (dis-)ability, or religion, that "serve as grounds for inclusion and exclusion, and for defining what is considered normal or deviant, and what is attractive to aspire for" (Kaijser & Kronsell, 2014, p. 419). The principle of intersectionality recognizes such intersections and the fact that a person can be affected by multiple oppressions at the same time and thereby widens the perspective of relevant factors that may influence an individuals' life (ibid). In the context of energy transitions, an intersectional perspective "brings issues of overlapping inequities to the fore in the analysis of efforts to mitigate climate change through introducing low-carbon energy technologies" (Johnson et al., 2020, p. 2) As the researcher must prioritize the most relevant fcators in the particular setting, the thesis focuses mainly on the underlying power relations of gendered inequalities in energy transition and energy policies of capitalist industrial states.

Studies have shown that decision-making powers are mostly influenced by the interests of global elites and large actors, who often ignore the energy needs and climate vulnerabilities of the world's poorest and most marginalized people (Johnson et al., 2020). Such hierarchical and oppressive systems lead to the reinforcement of inequalities and hence are the focus of an ecofeminist analysis (Ourkiya, 2021). Especially when considering that masculine norms are "deeply institutionalized in climate institutions [...] and policy-makers adapt their actions to the masculinized institutional environments" (Magnusdottir & Kronsell, 2015, p. 308). It follows that ecofeminists aim at "the deconstruction of oppressive social, economic, and political systems and the reconstruction of more viable social and political forms" (Lahar, 1991, p. 35). Because energy systems function as "structures of power and exclusion" (Cho et al., 2013), a deconstruction of such traditional power structures is essential for establishing a gender-just energy transition that recognizes the needs and interests of the most vulnerable groups in society. Consequently, the intersectional non-binary ecofeminism calls for a "truly transformative gender-mainstreaming in environmental policy while dismantling systems of oppression" to establish "a more inclusive world where people are treated equally" (Ourkiya, 2021, p. 6). The deconstruction of power relations to redistribute power and equality is a central aspect of gender mainstreaming and will be explained in the following.

2.2 A truly transformative gender mainstreaming

The principle of gender mainstreaming, defined as "[t]he systematic consideration of the differences between the conditions, situations and needs of women and men in all Community policies and action" (European Institute for Gender Equality, 2022a), was introduced as a strategy for increasing gender equality after the 1995 Beijing World Conference on Women by the United Nations. It has been incorporated in the Treaty of Amsterdam (1997) as an approach to including gender equality in all stages of the policy-making cycle in the EU (Guerrina, 2020). As mentioned in the introductory part, gender mainstreaming is also one of the guiding principles of the EU's Gender Equality Strategy. And even though studies on gender blindness in environmental and energy policies (Heffernan et al., 2021; Heidegger et al., 2021) show that the implementation of gender mainstreaming is aggravated, "gender mainstreaming is potentially a powerful transformative strategy that has the scope to put the promotion of gender equality at the heart of policy making" (Rees, 2005, p. 557). Rees (2005) identifies three approaches to promote gender equality in the EU: Tinkering, Tailoring, and Transforming. The model was initially implemented as a gender policy analysis framework, but Lawless et al. (2022) have adopted the Tailoring-Tinkering-Transforming approach for assessing gender equality in the context of socio-ecological change. As Tinkering and Tailoring can be considered tools to deliver gender mainstreaming, they should be valued alongside the establishment of gender mainstreaming (Rees, 2005).

Tinkering describes the equal treatment of women and men, also known as the "individualised rights-based approach to gender equality" (Rees, 2015, p. 557). Its rationale for gender equality is the inclusion of women in spaces occupied by men and all people conforming to dominant masculine norms. However, the framework remains in a legal system made for men. Tailoring means to "alter something to suit a particular need or situation" (Lawless et al., 2022, p.4) and can be described as "positive action measures" (Rees, 2005). The approach recognizes differences between men and women and directly responds to gendered inequalities by including them in policies and its processes. Finally, resulting in the formulation of initiatives that specifically respond to women's needs and interests. Thereby, the starting point of consideration has shifted from a men's toward a women's perspective. Consequently, gender equality concerns the different needs and interests of marginalized groups and acknowledges that identities are gendered and shape different opportunities in society (ibid.).

The transforming approach turns away the focus from individuals and their rights to equal treatment and rather looks at the meso or macro level, addressing how certain structures within certain systems affect those individual rights and even create disadvantages or inequalities. By doing so, institutionalized sexism, such as the institutionalization of male norms in environmental policy making, can be addressed, and power relations can be deconstructed. This approach moves away from accepting the male as the norm and starts valuing differences. Thereby, it can challenge systems and structures that value the domination of masculinity as the norm and "no longer underpin hierarchies and power relations based on gender." (Rees, 2005, p. 559) Gender equality, thus, is the "displacement of unequal gender norms, relations, structures and systems." (Lawless et al., 2022, p. 4)

As gender equality is increasingly important for mitigating climate change, mainstreaming gender in environmental and energy policies and deconstructing power hierarchies is necessary for achieving a just transition to a climate-neutral Europe (Allwood, 2020). An ecofeminist approach that acknowledges that such transition can only be just for all if it is inclusive and recognizes the needs and inequalities of the most vulnerable groups might also give further insight into where most systems are stuck in terms of gender mainstreaming and the achievement of a truly just transition. Consequently, two sub-questions (SQs) derived that guide the analysis.

SQ1: *"How are gender equality and gender-transformative measures integrated into the plans?"*

SQ2: "How do the plans assess gender-specific energy issues like energy poverty or affordability?"

A truly transformative gender mainstreaming is one major pillar of the ecofeminist approach used in the thesis. The second pillar concerns the criticism of capitalist market economies and the aim of deconstructing capitalist, oppressive and hierarchical systems as they reinforce structural inequalities and power structures. As an alternative to a capitalist economy, the ecofeminist well-being economy is introduced and will be explained in the following.

2.3 Well-being economy versus Green Capitalism

"Ecofeminist economics can contribute to a more comprehensive understanding of the growth economy and encourage the development of fresh perspectives on alternatives to capitalist growth" (Bauhardt, 2014, p. 60). Considering that European overconsumption is contributing to environmental degradation not only within the European Union but also beyond, it becomes obvious that the focus on "growthism" is problematic for the climate and the people (Wiese, 2021). One of the underlying problems is an economy that is organized around "the constant expansion of extraction, production, and consumption measured as Gross Domestic Product (GDP)" (Khan, 2016, p. 45). According to Wiese (2021), economic growth has been the main policy goal for the last 70 years, neglecting the value of care work, environmental quality, or education by not including those in the GDP calculations. As a result, they are mostly invisible to and not included in decision-making processes. Because this work is mostly done by the most vulnerable people in our society, they too have been excluded from the decision-making process and policy outcomes (as seen by the extent of gender blindness that environmental policy papers such as the EGD show). Turning towards a green economy by introducing green technologies does not change much for the environment or the people, as this approach still focuses on technological solutionism and believes that "environmental protection and GDP growth are compatible" (Ossewaarde & Ossewaarde-Lowtoo, 2020, p. 11). Even though renewable energy production has increased in the past years (Eurostat, 2022), they had a limited impact on fossil fuel consumption. According to York & Bell (2019), renewable energies only increased overall energy consumption growth instead of replacing fossil fuels. And hence, it can be considered as additions to the overall growth in energy consumption rather than as a source of supporting more sustainable outcomes. It follows that the concern for saving resources and protecting the environment is not the leading parameter of such economic structures. Consequently, "greening' energy systems [by introducing green technologies] may not make them any fairer, inclusive or just." (Johnson et al., 2020, p.1). Because technologies do not tackle existing socioeconomic structures, energy systems cannot get more inclusive or sustainable when remaining structurally dependent on GDP growth.

Therefore, the ecofeminist approach introduces the so-called "feminist well-being economy for all". A well-being economy according to Wiese (2021, p. 45) is about "equality and creating a good life for people and nature, rooted in the principles of care, cooperation and solidarity, the promotion of women's autonomy and leadership, valuing of local knowledge, and freedom from gender-based violence." Such economic model needs not only a transition towards low-carbon energy but also a transformation away from GDP growth and material extraction, "towards the goal of social and ecological justice and well-being." (Wiese, 2021, p. 48) It recognises nature as central actor, demanding efficient use of natural resources, and is taking a new approach to labour. According to Kallis et al. (2012, p. 179) "[t]here is a clear synergy that remains to be explored between ecofeminist economics (with its emphasis on the value of non-market work, and on real human needs) and the economics of degrowth". Establishing a macro-economic framework, that is "more resilient, just and explicitly priorities human and

non-human well-being over economic growth" (Wiese, 2021, p. 48) requires a fundamental shift in mindsets, recognition of inequalities and power structures, good governance, and political commitment. According to Wiese (2021), the European Union can play a major role in this transition by being a pioneer in introducing gender equality, the principle of care, and the priority of human and ecological well-being into all stages of policy-making processes, which would take the EU's economy a little closer to shift from being a maintenance economy towards a feminist well-being economy for all. "To ensure an economy which is both genderjust and inclusive and delivers on climate objectives, we need a holistic understanding of sustainability and of the necessary transition" (Heffernan et al., 2021). The ecofeminist demand for a truly transformative gender mainstreaming is necessary for such transition away from GDP growth. Consequently, a third sub-question can be derived from the theory.

SQ3: "What incentives guide the energy transition in the plans?"

Thus, the main theoretical assumption when analyzing environmental and climate policy documents with an ecofeminist lens is that technological solutions in form of renewable energy projects are only one part of climate solutions. As they do not tackle existing power structures, a deconstruction of such by mainstreaming gender equality and socially transformative solutions into energy policy making, is the ecofeminist goal.

3. Method: a qualitative content analysis

The following section will provide insights on the methods used for answering the research question. The benefits of a content analysis will be explained, and the way how it was conducted. The operationalization of ecofeminist values and the coding scheme will be presented. As well as the material used for the analysis and the countries for comparison.

3.1 Research design and method of analysis

For the thesis, a qualitative research design inspired by Creswell (2007) was chosen. As it is not the objective of the study to find out how often the word gender or gender equality is used in the policy documents but rather to find the incentives which are guiding the energy transition and underlying power structures related to gender and gender-transformative measures, a qualitative research design is simply a better fit for the research problem than quantitative measures or statistical methods. Within the qualitative research, a feminist postmodern approach, namely the ecofeminism, is followed, which is embedded in a constructivist worldview. This approach provides an "interpretative lens related to societal issues" (ibid., p. 24), such as the intersectionality of gender in the context of climate change and environmental policy. The use of such an interpretative lens is, according to Creswell (2007), often related to the call for action and transformation, which finds a place in this work by examining the ecofeminist call for a "truly transformative gender mainstreaming" (Ourkiya, 2021, p. 6). As feminist research "embraces many of the tenets of postmodern critiques as a challenge to current society" (Creswell, 2007, p. 25), the deconstruction of texts regarding their language or writing is often included in such research. Consequently, a close reading and interpretation of the policy documents in form of a content analysis seems the most convenient research method, as I will explain in the following. The research tool Atlas.ti was used in a first step to properly perform the analysis.

To answer the research question a content analysis, defined as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (Krippendorff, 2004, p. 18) will be performed. As the assumption of Kristianssen et al. (2017, p. 260) is followed, that "[h]ow a policy is designed and formulated has a direct effect on implementation and outcome", the direct analysis of NECPs seems to be the most informative way of pursuing the research's aim formulated in the research question. According to Julien (2008), a content analysis, in general, is very useful "for identifying both conscious and unconscious messages communicated by the text" (p.120). Hence, a qualitative content analysis does not only enable the detection of the extent to which a gender transformative approach has been used in the given policy documents but also what hidden meanings the text shows. In that way, performing a qualitative content analysis will provide insight into whether the NECPs promote a socially inclusive and gender-just transition or whether they follow the European lead of the EGD and are gender blind. Furthermore, a content analysis of publicly available policy documents does not require any personal contact, and biases that might arise during interviews can be reduced.

However, analyzing content is mostly subject-related and context-dependent and may reflect various meanings. According to Krippendorff (2004, p. 19f.), "[r]eading is fundamentally a qualitative process" and can never be separated from the researcher and the researcher's subjective context. On the one hand, this gives freedom to interpret the data in terms of the ecofeminist lens used in this paper. However, as qualitative research in general and qualitative content analysis especially are usually conducted in an interpretative manner by developing codes and categories for analysis inductively, and in an iterative process, the same text can be interpreted differently by different qualitative research (Julien, 2008). Because the researcher plays a very important role in qualitative research (Creswell, 2007), replicability and reliability of research results are crucial. By discussing the methods used in the analysis and how the analysis was conducted, the research results will become more reliable for others, ensuring that the study can be reproduced. Thereby, the thesis tries to meet the requirements of validity and reliability. Validity is further achieved by linking the results to a wider debate on gender-just and transformative environmental and energy policies and the issue of gender blindness in the European Union.

3.2 Operationalization and Coding

To answer the thesis research question on how the NECPs enable a gender-just energy transition, a qualitative content analysis inspired by Mayring (2014) was performed. To assess the policy documents properly, the theoretical approach of this work has been operationalized into ecofeminist values like gender equality, care or human and ecological well-being, that would enable a gender-just transition in opposition to capitalist values of growth and efficiency that do not necessarily lead to an inclusive transition. Hence, the ecofeminist theory is used as a starting point and provides the first assumption on what to look for in the policy documents. Therefore, the operationalization is mainly based on the literature review needed to formulate

this thesis' theory chapter. In form of an open coding, the policy documents have undergone a first reduction guided by the operationalized values. In a second step, the text has been further reduced into categories created from the findings in the text according to the theoretical lens used in this work. It has come visible that a gender-just transition can be induced for one by assessing measures on the micro-level concerning energy consumers and needs and energy-related issues like energy poverty, which all have a gendered dimension and require the inclusion of gender equality measures like tinkering or tailoring. And secondly, assessing measures on the meso-/macro-level concerning the governance and participation structure in the policymaking and the transition process and the economic incentives that have guided both. For the guarantee of energy justice, by recognizing the gender-energy nexus, the inclusion of a gendered approach through gender-transformative measures is necessary. Consequently, a coding scheme has been created as a result of the analysis that summarizes the main findings of the executed content analysis. The findings will be presented in the following analysis section. The operationalization and the coding scheme can be found in the appendix.

3.3 Data and Case Selection

The integrated National Energy and Climate Plans (NECPs) from Sweden, Germany, and Romania are chosen as material for the analysis. The NECPs were introduced by the Regulation on the Governance of the Energy Union and Climate Action (EU) 2018/1999, agreed as part of the Clean Energy for all Europeans package which was adopted in 2019. NECPs are considered a central monitoring tool for achieving the EU's 2030 goals for renewable energies and energy efficiency. For the first time, a direct policy comparison between the member states is possible due to the similar structure of each plan. The plans are divided into five sections: the overview and process for establishing the plan, national objectives and targets, policies and measures, current situation and projections with existing policies and measures, and finally, the impact assessment of planned policies and measures. Each section covers the five prime dimensions of the Energy Union: decarbonization, energy efficiency, energy security, internal energy market and research, innovation, and competitiveness. The similar structure does not only facilitate EU-wide cooperation and coordination across all governments but also enables a comparative analysis between the member states, which is aimed for in the thesis. As NECPs are publicly available, the final NECPs of the chosen countries were retrieved in English from the Commission's website. A draft version of the plans for the period from 2021-2030 has been revised by the Commission, and the final NECPs had to be submitted by the end of 2019, including the Commission's assessment and recommendation. By submitting a progress report every two years and through additional monitoring by the Commission, as part of the state of the energy union reports, the progress towards the targets set out in the NECPs, and the 2015 Paris Agreement shall be secured. Furthermore, the EU countries were required to consult citizens, business, and regional authorities in the drafting and finalization process to better develop and implement the plans and provide a level of planning regarding public and private investments. As the plans have been revised by the same Commission that has proclaimed a "Union of equality" (European Commission, 2020), one would assume that special attention has been paid to the inclusion of a gender mainstreaming approach when revising the NECPs.

What has already been mentioned in the introductory part is that the formulation of environmental and energy policies is very important as it affects people differently (Clancy & Feenstra, 2019). Furthermore, it is a great indicator for showing if or to what extent gender mainstreaming has been implemented in the policies. If a gender approach is missing and the policies are considered to be gender blind, it will further provide information about the background of the policies as well as the political and environmental systems and structures in which they were created in. Gender blind environmental policies are especially harmful, as they ignore that climate change is gendered and tends to have a greater effect on vulnerable groups (Heffernan et al., 2021). As the energy sector is subject to the biggest transformation due to climate change, the formulation of environmental and energy policies is especially crucial for a gender-just transition. By implementing gender blind environmental and energy policies, hierarchical power structures inherent to capitalist industrial states are being reinforced, amplifying existing inequalities (ibid). Even though the NECPs are setting the tone for environmental and energy action within member states through 2030, research in this field is still limited, making it particularly interesting for the analysis.

Choosing the three example countries was at its core influenced by their ranking on the Gender Equality Index (GEI), measured by the European Institute for Gender Equality since 2010. Following a most-different research design according to Mills (1843) (retrieved from: Jahn, 2013), I chose three countries with different index scores. Sweden, an EU member state since 1995, has always scored in first place with an increase of 3.8 points between 2010 and 2021. Since 2018 Sweden's score and ranking have not changed. The Index score for Sweden for the 2021 edition is 83,9 out of 100 points, and thereby the country scores 15,9 points higher than the overall EU mean of 68 points. (European Institute for Gender Equality, 2020a).

Germany, on the other hand, one of the founding states of ECSC in 1952, ranks only 10th in the EU with an index score of 68,6 points. Therefore, the country scores only 0,6 points above the EU's score. Between 2010 and 2021, Germany's score has increased by 6 points; since 2018, the score has increased by 1,1 points improving the country's ranking by one place. Germany is not only the economically strongest nation in the EU (Eurostat, 2022) but also its self-image and the perception from outside leaves Germany, according to the Gesellschaft für Internationale Zusammenarbeit (GIZ) (2018), as a "guardian of the values of the Western world" (p. 2), "role model for the world" (p.3), "cooperative leader" (p. 28). So, it is rather surprising that Germany is not taking a leading role in the context of gender equality but is just mediocre.

Romania, an EU member state since the fifth wave of the EU enlargement in 2007, ranks in 25th place with 54,5 points, which is 13,5 points below the EU's score. Since 2010 Romania's score has increased by 3,7 points and has remained the same since 2018. Thus, its ranking has remained the same as well. (European Institute for Gender Equality, 2020b)

As energy poverty is a highly gendered issue (Clancy & Feenstra, 2019), the level of energy poverty per country in 2020 has also been included in the case selection. Sweden scores the lowest with 2,7 %, followed by Germany with 9% and Romania with 10% (Eurostat, 2022). Consequently, Sweden serves as what can be called a "control case" for performing best in the

Gender Equality Index and having the lowest energy poverty rate. Countries with differing gender equality and energy poverty scores have been selected for the analysis to guarantee a case variety and reduce general biases. Furthermore, it is to mention that the three countries differ as well regarding the type of welfare state. As welfare policies are essential to the overall well-being of all people and, according to (Dackweiler, 2010, p. 521) can further be considered "gender policies", making a welfare state's institutions are an "arena of gender-political fights". Esping-Andersen (1990) introduces three types of welfare capitalism. According to that typology, Sweden is considered a universal social-democratic type, Germany is a corporative-conservative type, and Romania can be viewed as a post-communist developing welfare state (H. J. M. Fenger, 2007). Generally, a country comparison might help evaluate best practices in a country's national environmental and gender policies and understand cultural differences in their gender mainstreaming approach.

It is taken into consideration that qualitative research implies a "time-consuming process of data analysis [...] [by] sorting through large amounts of data and reducing them to a few themes or categories." (Creswell, p. 41). As time and resources are limited, the focus lies mainly in the analysis of the second and third section of the NECPs, "Objectives and targets" and "Policies and measures". The extent to which the objectives include gender equality will lastly be represented in the actual measures. However, without explicit measures the targets are not necessarily binding and have only symbolically meaning. Therefore, taking both into account provides the best insight.

4. Analysis

Before analysing the individual NECPs, the Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action was considered as the NECPs are based on that document. In general, the regulation "sets out the necessary legislative foundation for reliable, inclusive, cost-effective, transparent and predictable governance of the Energy Union and Climate Action" (p.1). In paragraph 45, the regulation refers to the Paris Agreement and its obligation to consider human rights and gender equality when taking action concerning climate change. The Member States are furthermore called on to "adequately integrate the dimensions of human rights and gender equality in their integrated national energy and climate plans and long-term strategies" (L 328/p. 8). The biennial progress reports should serve as a tool for reporting on how the promotion of human rights and gender equality is implemented through the NECPs (ibid.). This requirement and the fact that the NECPs are part of the general EU legislation, which is founded on certain rights and values and enshrined in the EU treaties, an equal treatment approach (tinkering) should be inherent to all NECPs. Furthermore, the regulation calls for a transformative approach by mainstreaming gender equality into the plans and all climate change action. Having that in mind, it appears rather surprising that none of the three Member States analyzed in the thesis seem to have included gender equality as an objective of the national energy transition (NECP Sweden, NECP Germany, NECP Romania).

A thorough analysis of each plan will show to what extent the NECPs of Sweden, Germany, and Romania promote a gender-just transition. The analysis was led by the theoretical assumptions of the non-binary intersectional ecofeminist framework and the sub-questions concerning the inclusion of gender equality and gender-transformative measures, the assessment of gendered issues in the context of the energy transition, and the incentives guiding the transition. While the integration of gender equality and gender-transformative measures can be included on the micro as well as on the meso-/ macro-level, the assessment of gendered energy issues mainly concerns the micro-level. The incentives guiding the transition in the plans relate primarily to the macro-level. The analysis is divided into three sub-sections, according to the countries of analysis. Each country analysis is further sub-divided according to the three sub-questions. Ultimately the analysis ends in a country comparison and a presentation of the results. As Sweden is considered a role pioneer regarding gender equality, its NECP is analysed first.

4.1 Sweden

As Sweden scores highest in the Gender Equality Index, one could assume that, despite the EU's widespread gender blindness, Sweden attaches a certain degree of importance to the inclusion of gender equality aspects in its environmental policies. And in fact, Sweden has included a whole section regarding gender mainstreaming in its NECP. Under section 3.1.3 (Other elements of the dimension "Decarbonization"), policies and measures to achieve other national targets are listed, including the Swedish gender mainstreaming approach. The section refers to the claim mentioned in the Paris Agreement that human rights and the promotion of gender equality must be considered when transitioning towards a fossil-free economy. The under-representation of women in decision-making and the unequal opportunities to influence climate-related policy, planning and implementation are acknowledged (p. 72). As well as the gendered effects of climate change. The document states that Sweden's gender equality approach "aims to ensure that all women and men have the same power and opportunities to shape society and their own lives." (p. 73) And this aim shall also be embedded in environmental policymaking. Even though a gender mainstreaming approach is claimed to be used in any policymaking and might have been implemented in developing the plan itself, the policy measures outcome lacks any reference to gender.

In the context of the energy security dimension (p. 173), the costs of climate change for society are issued, referring to the Stern Review (2006). The section acknowledges the fact that "women are generally more at risk from climate change, work in more exposed environments, and suffer to a greater extent than men from the disasters caused by climate change." (p. 173) Therefore, the Swedish government believes that meeting the targets mentioned in this plan contributes to the enhancement of gender equality more generally. However, no positive action measure regarding the special needs of women and the reduction of gendered inequalities is made, and references to a diverse and intersectional approach are also missing. In fact, the only time a distinction between the (non-binary) genders is made is when listing the number of researchers related to low-carbon technologies financed by public or private spending (p. 165).

Regarding the assessment of gendered energy issues, energy poverty is not considered a distinct issue compared to general poverty. So, the term is not used in Sweden's plan, and there are no targeted policies to deal with in this regard (p. 38, p. 75, p. 109). Regardless, "vulnerable costumers" defined as " persons who permanently lack the means to pay for the electricity or

natural gas transmitted or delivered to them for non-business purposes"" (p. 108, according to the Ordinance (2016, p.742) do find a mentioning in the plan. The fact that vulnerable consumers are called customers has a striking effect as it gives further insight into the economic incentive behind the plan and attributes to the thinking of growth and extraction. However, the plan emphasizes dialogue between the government, business, municipalities, other operators, and civil society. And even introduces local climate and energy advisors and councils that "provide objective information tailored to the locality and advises on energy efficiency measures, energy consumption, and climate-related issues in buildings and households" (p. 46). Individuals, and also the vulnerable ones, can get support and advice on suitable measures. The plan acknowledges that "information about possible and suitable measures is often asymmetric" (p. 75), which in turn reinforces power hierarchies. Due to the inclusion of local actors like municipalities and civil society, participation in the transitioning process is broadened, and more democratic and capitalist elite structures can be challenged. Vulnerable energy can be supported by the local advisors, which further helps to break down elite structures and include the need of individuals.

Sweden's incentive for the transition is to aim for a fossil-free world (p.45). Sweden wants to be a "fossil-free welfare state, in which climate work creates innovations, increases competitiveness and improves health" (p. 40). Sweden further aims to show that "climate transition is compatible with welfare and good competition" (p. 40). The emphasis on welfare and health improvement contributes in a broader sense to a well-being incentive for humans and nature. However, gender equality and the destruction of power structures and inequalities are not included in that aim, and the economic incentive of competition remains strong.

4.2 Germany

Germany is considered one of the EU's role models in various aspects. Surprisingly they do not perform well on the Gender Equality Index. This issue becomes even more obvious as the German plan does not once refer to a gendered approach or gender equality. Therefore, no gender-transformative measures are presented in the plan. Regarding the micro level, the German NECP dedicates a whole section to energy poverty, and "affordability in the context of the energy transition is a priority for Germany" (p. 58). In that context, the text refers to the constitutionally guaranteed right to a guaranteed minimum subsistence level fit for human beings (Article 1(1) of the Basic Law in conjunction with the social state principle pursuant to Article 20(1) of the Basic Law) that vulnerable consumers can make use of. According to the plan, an energy requirement does "essentially form[...] part of the minimum subsistence level fit for human beings." (p. 58) The minimum guaranteed income schemes state that reasonable costs for heating energy are fully covered, and household energy is considered as part of the "normal requirement" on a flat-rate basis. Further requirements and measures are listed, and the change of supplier, energy-saving behavior, and energy efficiency measures are additional factors that are recommended to positively influence the energy costs of individuals. In addition, the plan refers to existing funding programs and consumer advisory services that are considered "useful measures for preventing supply disconnections" (p. 59). The Energy Savings Check is such an advisory service that low-income households can access for free. Consulting services that are available for everyone "are intended to eliminate bias and obstacles to energy renovations and the use of renewable energies." (p. 86) The services are "tailored to the various interests of private households" and hence should consider gendered income disparities. However, no references to gendered inequalities regarding income or affordability of energy are made.

Even though the German plan relies heavily on the introduction of technologies "that use little electricity to replace as many fossil fuels as possible" (p.85), references to "non-technical dimensions [of the energy transition] such as societal processes or innovation-friendly framework conditions" (p. 60) are made. Social justice is mentioned as principle of phasing out of hard-coal mining (p. 84), acknowledging the inequalities inherent to such transition. Furthermore, Germany considers the renewable energy communities to "have great potential for the successful expansion of renewable energies at national and European level" (p.74). Hence, Germany is supporting the development of such by introducing a regulatory framework that considers the fact that "[a]ccess to renewable energy communities is open to end consumers in Germany in a non-discriminatory manner, as is the access of renewable energy communities to the existing support schemes." (p. 74) However, one of the main priorities in the transition is competitiveness (p. 60f.). The plan refers to the reduction of energy consumption in Germany and the EU, but the growth incentive remains strong (p. 60, p. 70). After all, the "purposeful, efficient and increasingly market-oriented expansion of renewable energies" remains the main incentive for transition (p. 69)

4.3 Romania

Romania has the lowest gender equality index and the highest poverty rate among the three example countries. Accordingly, one would assume that it scores lowest in the analysis on gender-just transition policies. Regarding the inclusion of gender equality, the term is mentioned only once in the policy document when referring to other policies and measures pertaining to the dimension "Research, innovation and competitiveness" (p. 139). Gender equality should be fostered by developing higher education in the field of energy and harmonizing it with the energy sector, and by establishing partnerships with the energy industry for education and vocational training. The same goes for supporting vocational secondary education in the field of energy. Which can also be considered as positive action measures (tailoring) towards the inclusion of women in the energy workforce. Concerning the microlevel of energy justice, the NECP of Romania focuses strongly on energy consumers, especially vulnerable consumer groups, defined as "person with low income and/ or with health conditions" (p. 134). As women, trans, LGBTQAI+, or other minorities can be considered vulnerable groups affected by the intersectionality of climate change effects, they could be given a special status in the Romanian plan. And even though measures for "adaptation to climate change" (p. 91) are presented in this context, no explicit mentioning of the intersectionality and gendered effects of climate change are made.

Energy poverty, an energy-related issue affecting especially vulnerable energy consumers with a low income, is addressed in its section within the internal energy market dimension (p. 73-73 & p. 134-136). As the Commission has recommended for the Member States with "a significant number of households in energy poverty" (p. 73) to include objectives aiming at the reduction

of such, several measures are listed, making energy poverty "a prime issue" (p. 73) for the country. The plan states that the country has made progress in combating the issue in the past years, but Romania still lags behind the EU average. In that context, the plan mentions safeguarding human rights as an overarching objective for reducing energy poverty and protecting vulnerable consumers, fulfilling the requirements of the Regulation mentioned above. Social protection measures as part of the Strategic Action Plan include social assistance systems to "protect low-income persons, and one of the specific objectives is to protect low-income and vulnerable consumers against the shocks generated by an increase in energy prices" (p. 135). A solidarity fund should further support those. As women are disproportionally more likely to lead single-headed households and be affected by income disparities which lead to a life in (energy) poverty, those measures could be considered as positive action measures (tailoring), but the references to the specific gendered inequalities and women in this context are missing.

The overall incentive guiding the transition seems to be the "low-carbon green economic growth" (NECP Romania p. 81). Because even though some references to reducing energy consumption and energy savings are made (e.g., p. 96, p. 109), the gross final energy consumption is expected to increase 2,7 % in the period 2021-2030 (p. 58). Instead of prioritizing human and ecological well-being and gender equality, "energy efficiency in the process of transition towards clean energy" (p. 60) is one of the priorities. The exchange with local entities and NGOs and the importance of the individual role in the transition is also mentioned in the paper (p. 109) and hence follows the instruction of including the public as stated in the Regulation. Thus, the bottom-up movements are included here as well, challenging capitalist elite structures.

4.4 Comparison and discussion of results

After analysing each NECP separately, the findings are compared to get an overall impression of the promotion of a gender-just transition in the EU. A country comparison might give insights into the member states' general approach to a just transition and the importance they attach to gender equality. The comparison is guided by the sub-questions and aspects of the case selection have been taken into account as well.

None of the three NECPs mention gender equality in their objectives for the transition. In general, very little concrete commitment towards a gender-inclusive transition and only a few explicit links to gender equality are made. Sweden does include a section explaining Sweden's gender mainstreaming approach, recognizing the gendered effects of climate change and the inequalities between men and women. However, the measures proposed in the plan do not refer to any gendered approach, nor do they include gender equality. Romania relates to gender equality once in the context of research and innovation to support higher education in energy. Germany does not mention gender equality, nor any other reference to gender or gendered inequalities. The focus on gender equality differs in the countries, as do their scores on the Gender Equality Index. However, the assumptions that the performance on the Gender Equality Index correlates with the integration of gender equality and gender transformative measures in the plans cannot be confirmed. It is to specially highlight the cases of Germany and Romania.

While Germany scores around the EU average, no reference to gender equality is included in the German plan. In the plans that mention gender equality, no concrete commitments, or measures regarding a gender-just transition can be recognized.

The fact that Sweden does mention their approach to gender mainstreaming and recognizes the gendered effects of climate change is considered positive as it raises awareness that the inclusion of gender equality is an important factor in the transition towards renewable energies and the mitigation of climate change. However, it is meaningless and can be considered as what Allwood (2020) calls "checking boxes". Consequently, it does not lead to concrete gender-transformative measures that promote an inclusive and gender-just transition for all. As I said in the methods section, the work is not necessarily about finding out how often the word gender equality is mentioned in the text. As it is a qualitative work, the underlying meanings need to be accessed. However, no gender approach can be taken if the word gender equality does not find a mentioning at all. If gendered inequalities are not adequately assessed and power structures properly recognized and deconstructed, hierarchical inequalities only get reinforced.

The way gendered energy issues like energy poverty are assessed in the countries also differs. Sweden does not attach any importance to energy poverty, which can be connected to the fact that the share of people living in energy poverty in Sweden lies below three percent. Anyhow, the issue is visible in Sweden, so actions targeted at reducing such to enable a transition that all can benefit from should be taken. Germany and Romania on the other hand, are more affected by energy poverty and consequently present more measures in that regard. In all three cases, the status of vulnerable energy consumers is considered, and support measures are introduced. However, no positive action measures towards women or other marginalized groups are mentioned. The fact that energy poverty and vulnerable consumers are defined differently might further contribute to the differing approaches. If gendered inequalities related to energy access and the energy transition are not properly assessed, the chances of a just transition that all can benefit from decreases. With rising energy prices due to energy supply shortages from Russia or the transition to renewables, energy poverty only raises, and existing inequalities get deepened. A common definition of energy poverty that covers the multiple contributing factors, including gender, might be beneficial for establishing an inclusive approach. Genderresponsive consumer models and gender-aware funding could further contribute to an inclusive transition. Gender-responsive tax systems that consider the fact that women are more likely affected by energy poverty could even prevent further inequalities.

As all three countries are characterized by economies that are dependent on their GDP, all NECPs are characterized by a strong focus on technocratic solutions and economic growth. Even though social justice aspects (NECP Germany) and the importance of the welfare state (NECP Sweden) also appear in the texts, gender-inclusive and transformative measures are not suggested. As all of them are industrial capitalist states in the EU, this might not be a surprise; however, it is surprising that not even Sweden shows any signs of a "truly transformative gender mainstreaming", even though gender mainstreaming is a crucial aspect of the country's policymaking, as stated in the plan. The focus on GDP and growthism hinders a more holistic approach to sustainability and neglects the value of reproductive and care work. And that is even though paid and unpaid care work is central to holding the society together. The Corona-

pandemic made that especially obvious. But even without a pandemic, every person needs care, from birth until death. Hence, it can be stated that the capitalist so-called free market does not recognize the interconnectedness of society, economy and environment when focusing on a growth-driven market system while ignoring gender matters such as domestic or unpaid care work (Wiese, 2021). The shift towards a well-being economy with reframed policy goals away from GDP growth towards human and ecological well-being would include such values. And even though "[f]eminist energy systems may be utopic in scale and vision" (Bell et al., 2020, p. 4) energy approaches that do not include inclusive and fair measures that keep pointing "toward monocultures and that work to exclude and discourage biodiversity and human difference – such as market-centric thinking, extractivism, white supremacy, or patriarchy – can and should be resisted." (ibid, p. 4) For that resistance, a shift in economic and political thinking in capitalist industrial states is needed. Gender mainstreaming can be a transformative strategy that can challenge existing norms and lead to a shift that prioritizes a truly gender-just energy transition. The Member States do play a crucial part in the transition processes; however, they often rely on EU budgets and frameworks. If those frameworks are not inclusive, it is not surprising that also the NECPs remain gender blind.

5. Conclusion

As the integration of gender equality, as well as the assessment of gendered energy issues and the recognition of ecofeminist values guiding the incentives of transition, are not explicitly mentioned in the plans, the extent to which the NECPs promote a gender-just transition in the European Union is already limited. Not following a gendered approach leads to the fact that the needs of vulnerable groups cannot be fully included in the transitioning process. That automatically excludes parts of society from the transitioning process and makes the energy transition neither just nor inclusive. By not taking gender-transformative measures into account, hierarchical power structures of capitalist patriarchal states cannot be challenged. Unchanged power structures lead to the reinforcement of inequalities in the energy sector. And energyrelated issues like energy poverty and gendered energy consumption cannot be reduced if they are not properly acknowledged and included in the plans. The NECPs are considered genderblind, as they do not follow a holistic approach of the gender-energy nexus in energy transitions. If gender equality is not mainstreamed at all stages of policymaking, the NECPs become less inclusive and hence less effective in terms of social justice and sustainability. Even though, we have learned, gender equality is a prerequisite for sustainable systems and consequently needs to be included in policies related to such. Therefore, energy policies should move from genderblind to gender transformative by including the needs of the most vulnerable groups in society and moving towards an economy that puts human and ecological wellbeing over GDP growth. The mainstreaming of gender is crucial for that. Furthermore, by not incorporating a gender mainstreaming approach, the plans are not only incongruent with the SDGs, the Paris Agreement, and the Gender Equality Strategy of the EU, but sustain unequal gender norms and the hierarchical order inherent to such. Policies that do not recognize the intersection of gender in energy transitions cannot lead to a gender-just transition. And therefore, it can be concluded that the Swedish, German, and Romanian NECPs barely promote a gender-just transition in the European Union.

The thesis results raise awareness of the importance of including socially transformative measures, like the gender mainstreaming approach, into the transition towards renewable energies to be ecologically successful and gender-just. By doing so, this work contributes to the debate on gender-just energy policies and the need to recognize the gender-energy nexus in energy research and energy-related policymaking. As the example countries have been chosen on the premise of a most different system design for the purpose of case variation, they are considered to represent the EU in this work. Using an ecofeminist lens that recognizes the intersectionality of gender and the gendered effects of climate change was useful to introduce an alternative perspective to the traditional capitalist economic thinking that underlies the Member States NECPs. By showing that the Swedish, German and Romanian NECPs barely promote a gender-just transition, awareness for future policymaking rises. The findings can and should be included in future research and the biennial review of the plan to improve the countries' performance. The gendered dimension of energy and energy transitions needs to get more attention on the political agenda and in energy research. By underlining the importance of such the institutionalization of unequal gender norms and institutionalized sexism might be challenged.

Regardless, qualitative content analyses are always subject to subjective interpretation, as explained in the methodology section. Additionally, I was the only researcher participating in the study. That is why the thesis aimed to work most transparently and reliably as possible. Due to limitations regarding time and resources, only the targets and measures of three NECPs have been analysed in this work. For the purpose of generalization, the analysis of more if not all 27 NECPs would be necessary, including further case studies and analysis of each country's additional environmental and energy policies. Future research should also consider the country-specific contexts to guarantee a comprehensive understanding of the country's context. Even quantitative research could be considered for the purpose of reliability. The relation between welfare policies, gender regimes and environmental institutions could give further insights to what makes the Member States and the EU itself promote a gender-just energy transition. To achieve a holistic approach and to give more reliable insights on the promotion of a gender-just transition in the European Union and among the Member States more extensive research is needed.

6. List of consulted documents

NECP Germany: Federal Government. Ministry for Economic Affairs and Climate Change. (2020). *Integrated National Energy and Climate Plan*. Berlin, Germany. https://ec.europa.eu/i nfo/energy-climate-change-environment/implementation-eu-countries/energy-and-climate-governance-and-reporting/national-energy-and-climate-plans_en

NECP Romania: Government of Romania (2020). *The 2021-2030 Integrated National Energy and Climate Plan.* Bucharest, Romania. https://ec.europa.eu/info/energy-climate-change-envir onment/implementation-eu-countries/energy-and-climate-governance-and-reporting/national-energy-and-climate-plans_en

NECP Sweden: Government of Sweden, Ministry of Infrastructure. (2020) *Sweden's Integrated National Energy and Climate Plan*. Regeringen, Stockholm, Sweden. https://ec.europa.eu/info/energy-climate-change-environment/implementation-eu-countries/energy-and-climate-governance-and-reporting/national-energy-and-climate-plans_en

Regulation (EU) 2018/1999. *The Governance of the Energy Union and Climate Action*. Parliament, Council of the European Union. https://eur-lex-europa-eu.ezproxy2.utwente.nl/leg al-content/EN/TXT/?uri=uriserv:OJ.L_.2018.328.01.0001.01.ENG&toc=OJ:L:2018:328:TOC

7. List of references

Allwood, G. (2020). Mainstreaming Gender and Climate Change to Achieve a Just Transition to a Climate-Neutral Europe. *JCMS: Journal of Common Market Studies*, 58(S1), 173–186. https://doi.org/10.1111/jcms.13082

Bauhardt, C. (2014). Solutions to the crisis? The Green New Deal, Degrowth, and the Solidarity Economy: Alternatives to the capitalist growth economy from an ecofeminist economics perspective. *Ecological Economics*, *102*, 60-68. https://doi.org/10.1016/j.ecolecon.2014.03.01 5

Bell, S. E., Daggett, C., & Labuski, C. (2020). Toward feminist energy systems: Why adding women and solar panels is not enough☆. *Energy Research & Social Science*, 68, 101557. https://doi.org/10.1016/j.erss.2020.101557

Ceceleski, E. W. (1995). From Rio to Bejing—Engendering the energy debate. *Energy Policy*, 23(6), 561–575. https://www.sciencedirect.com/science/article/abs/pii/0301421595912414

Cho, S., Crenshaw, K., & McCall, L. (2013). Toward a Field of Intersectionality Studies: Theory, Applicatinos, and Praxis. *The University of Chicago Press Journals*, *38*(4), 758–810. https://www.journals.uchicago.edu/doi/full/10.1086/669608

Clancy, J., Daskalova, V., Feenstra, M., Franceschelli, N., & Sanz, M. (2017). *Gender perspective on access to energy in the EU* (p. 106). European Parliament, Femm Committee. https://www.europarl.europa.eu/RegData/etudes/STUD/2017/596816/IPOL_STU(2017)59681 6_EN.pdf

Clancy, J., & Feenstra, M. (2019). *Women, Gender Equality and the Energy Transition in the EU*. 62. https://www.europarl.europa.eu/RegData/etudes/STUD/2019/608867/IPOL_STU(201 9)608867_EN.pdf

Clancy, J., Skutsch, M., & Batchelor, S. (2002). The Gender-Energy-Poverty Nexus. Finding the energy to address gender concerns in development. *UK Department for International Development (DFID)*, 24. https://esmap.org/sites/default/files/resources- document/The%20G ender%20Energy%20Poverty%20Nexus.pdf

Connell, R. W. (1990). A Whole New World: Remaking Masculinity in the Context of the Environmental Movement. *Sociologists for Women in Society*, 4(4), 452-478. https://www.jst or.org/stable/189749?seq=1

Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic Masculinity: Rethinking the Concept. *Gender & Society*, 19(6), 829–859. https://doi.org/10.1177/0891243205278639

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed). Sage Publications.

Crispeels, P., Robertson, M., Somers, K., & Wiebes, E. (2022). Outsprinting the energy crisis. *McKinsey & Company*, 4.

Dackweiler, R.-M. (2010). Wohlfahrtsstaat: Institutionelle Regulierung und Transformation der Geschlechterverhältnisse. In Becker & Kortendiek, *Handbuch Frauen- und Geschlechterforschung* (pp. 520–531).

Daggett, C. (2018). Petro-masculinity: Fossil Fuels and Authoritarian Desire. *Millennium: Journal of International Studies*, 47(1), 25–44. https://doi.org/10.1177/0305829818775817

Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH. (2018). 3. Studie – Deutschland in den Augen der Welt. https://www.giz.de/de/downloads/Deutschland-in-den-Augen-der-Welt-GIZ-Erhebung-2017-2018.pdf

Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princton University Press. https://lanekenworthy.files.wordpress.com/2017/03/reading-espingandersen1990pp9to7 8.pdf

European Commission. (n.d.-a). *Energy Poverty*. European Commission. Retrieved 24 June 2022, from https://energy.ec.europa.eu/topics/markets-and-consumers/energy-consumerrights/energy-poverty_en

European Commission. (n.d.-b). *Gender Equality Strategy. Achievements and key areas for action*. European Commission. https://ec-europa-eu.ezproxy2.utwente.nl/info/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en

European Commission. (2020). Union of equality: The first year of actions and achievements. European Commission. https://ec-europa-eu.ezproxy2.utwente.nl/commission/commissioners/2019-2024/dalli/announcements/union-equality-first-year-actions-and-achievements_en

European Commission. (2022). *REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition**. European Commission. https://ec-europa-eu.ezproxy2.utwente.nl/commission/presscorner/detail/en/IP_22_3131

European Environmental Bureau, & Women Engage for a Common Future. (2021). Why the Europeaen Green Deal needs Ecofeminism. Moving from gender-blind to gender-

trasnfomrative environemntal policies. https://eeb.org/wp-content/uploads/2021/07/Report-16.pdf

European Institute for Gender Equality. (2020a). *Gender Equality Index 2021*. https://eigeeuropa-eu.ezproxy2.utwente.nl/gender-equality-index/2021/country/SE

European Institute for Gender Equality. (2020b). *Gender Equality Index 2021 Romania*. https://eige-europa-eu.ezproxy2.utwente.nl/gender-equality-index/2021/country/RO

European Institute for Gender Equality. (2022a). *Concepts and Definitions—Gender Mainstreaming*. European Institute for Gender Equality. https://eige-europa-eu.ezproxy2.utwe nte.nl/gender-mainstreaming/concepts-and-definitions

European Institute for Gender Equality. (2022b). *Definition Gender Equality*. European Institute for Gender Equality. https://eige-europe-eu.ezproxy2.utwente.nl/gender-mainstreami ng/concepts-and-definitions

Eurostat. (2022). *What is the share of renewable energy in the EU*? Eurostat. https://ec-europa-eu.ezproxy2.utwente.nl/eurostat/cache/infographs/energy/bloc-4c.html

Eurostat (Ed.). (2022). Europäische Union: Bruttoinlandsprodukt (BIP) in den Mitgliedsstaaten der Eu im Jahr 2021 (in MIlliarden Euro und jeweiligen Preisen) [Graph]. Statista. https://de.statista.com/statistik/daten/studie/188776/umfrage/bruttoinlandsprodukt-bip-in-den-eu-laendern/#professional

Feenstra, M. (2021). *Gender Just Energy Policy*. *Engendering the energy transition in Europe*. https://research.utwente.nl/en/publications/gender-just-energy-policy-engendering-theenergy-transition-in-eu

Fenger, H. J. M. (2007). *Welfare regimes in Central and Eastern Europe: Incorporating postcommunist countries in a welfare regime typology*. https://repub.eur.nl/pub/34876/

Guerrina, R. (2020). Chapter 6 From Amsterdam to Lisbon and beyond: Reflections on twenty years of gender mainstreaming in the EU. *European Trade Union Institute (ETUI)*, 125–142.

Heffernan, R., Heidegger, P., Köhler, G., Stock, A., & Wiese, K. (2021). *A Feminist European Green Deal*. 36. https://library.fes.de/pdf-files/iez/18990.pdf

Heidegger, P., Lharaig, N., Wiese, K., Stock, A., & Heffernan, R. (2021). *Why the European Green Deal needs Ecofeminism. Moving from gender-blind to gender-transformative enviornmnental policies.* (p. 144). European Environmental Bureau & Women Engage for a Common Future. https://eeb.org/library/why-the-european-green-deal-needs-ecofeminism

Herrero, Y. (2013). Miradas ecofeministas para transitar a un mundo justo y sostenible. https://www.avlaflor.org/wp-content/uploads/2016/12/09_YayoHerrero.pdf

Jahn, D. (2013). *Einführung in die vergleichende Politikwissenschaft* (2nd ed.). Springer SV. Johnson, O. W., Han, J. Y.-C., Knight, A.-L., Mortensen, S., Aung, M. T., Boyland, M., & Resurrección, B. P. (2020). Intersectionality and energy transitions: A review of gender, social equity and low-carbon energy. *Energy Research & Social Science*, 70, 101774. https://doi.org/10.1016/j.erss.2020.101774

Julien, H. (2008). Content Analysis. In L. M. Given (Ed.), *The Sage Encyclopedia of Qualitative Research Methods* (Vols 1 & 2). Sage.

Kaijser, A., & Kronsell, A. (2014). Climate change through the lens of intersectionality. *Environmental Politics*, 23(3), 417–433. https://doi.org/10.1080/09644016.2013.835203

Kallis, G., Kerschner, C., & Martinez-Alier, J. (2012). The economics of degrowth. *Ecological Economics*, *84*, 172–180. https://doi.org/10.1016/j.ecolecon.2012.08.017

Khan, T. (2016). Feminism, Environmental Economics, and Accountability. In *Handbook of Environmental and Sustainable Finance* (pp. 207-237). Elsevier. https://doi.org/10.1016/B978-0-12-803615-0.00011-X

Krippendorff, K. (2004). Content analysis: An introduction to its methodology (2nd ed). Sage.

Kristianssen, A.-C., Andersson, R., Belin, M.-A., & Nilsen, P. (2017). Swedish Vision Zero policies for safety – A comparative policy content analysis. *Elsevier*, 260–269.

Lahar, S. (1991). Ecofeminist Theory and Grassroots Politics. *Hypatia*, 6(1), 28–45. https://doi.org/10.1111/j.1527-2001.1991.tb00207.x

Lawless, S., Cohen, P. J., McDougall, C., Mangubhai, S., Song, A. M., & Morrison, T. H. (2022). Tinker, tailor or transform: Gender equality amidst social-ecological change. *Global Environmental Change*, *72*, 102434. https://doi.org/10.1016/j.gloenvcha.2021.102434

Magnusdottir, G. L., & Kronsell, A. (2015). The (In)Visibility of Gender in Scandinavian Climate Policy-Making. *International Feminist Journal of Politics*, *17*(2), 308–326. https://doi.org/10.1080/14616742.2014.896661

Mayring, P. (2014). *Qualitative Content Analysis. Theoretical Foundation, Basic Procedures and Software Solution.*

Mies, M., & Shiva, V. (1993). *Ecofeminism*. Zed Books. https://doi.org/10.5040/9781350219 786

Ossewaarde, M., & Ossewaarde-Lowtoo, R. (2020). The EU's Green Deal: A Third Alternative to Green Growth and Degrowth? *Sustainability*, *12*(23), 9825. https://doi.org/10.3390/su1223 9825

Ourkiya, A. (2021). Foreword. In *Why the European Green Deal needs Ecofeminism. Moving from gender-blind to gender-transformative environmental policies.* (p. 144). European Environmental Bureau & Women Engage for a Common Future. https://eeb.org/library/why-the-european-green-deal-needs-ecofeminism

Owusu-Manu, D.-G., Sackey, D. M., Osei-Asibey, D., Agyapong, R. K., & Edwards, D. J. (2021). Improving women's energy access, rights and equitable sustainable development: A Ghanaian perspective. *Ecofeminism and Climate Change*. https://doi.org/10.1108/EFCC-05-2021-0009

Paris Agreement, United Nations (2015). https://unfccc.int/sites/default/files/english_paris_ag reement.pdf

Räty, R., & Carlsson-Kanyama, A. (2010). Energy consumption by gender in some European countries. *Energy Policy*, *38*(1), 646–649. https://doi.org/10.1016/j.enpol.2009.08.010 Raworth, K. (2017). A Doughnut for the Anthropocene: Humanity's compass in the 21st century. *The Lancet Planetary Health*, *1*(2), 48–49. https://doi.org/10.1016/S2542-5196(17)30028-1

Rees, T. (2005). Reflections on the uneven development of gender mainstreaming in Europe. *International Feminist Journal of Politics*, 7(4), 555-574. https://doi.org/10.1080/1461674050 0284532

Stern, N. (2006). *The Economics of Climate Change: The Stern Review*. Cambridge University Press. http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview_report_c omplete.pdf

United Nations. (n.d.). *Make the SDGs a reality*. United Nations, Department of Economic and Social Affairs, Sustainable Development. Retrieved 24 June 2022, from https://sdgs.un.org/#g oal_section

Vieira, L. C., Longo, M., & Mura, M. (2021). Are the European manufacturing and energy sectors on track for achieving net-zero emissions in 2050? An empirical analysis. *Energy Policy*, *156*, 112464. https://doi.org/10.1016/j.enpol.2021.112464

Wiese, K. (2021). A Feminist Well-Being Economy for All. In *Why the European Green Deal needs Ecofeminism. Moving from gender-blind to gender-transformative environmental policies.* European Environmental Bureau & Women Engage for a Common Future. https://eeb.org/library/why-the-european-green-deal-needs-ecofeminism

Wilson, S. (2018). Energy Imaginaries: Feminist and Decolonial Futures. *Materialism and the Critique of Energy*, 377-412. http://sheenawilson.ca/wp-content/uploads/2015/08/Energy_Ima ginaries_Feminist_and_Decoloni.pdf

World Bank Group. (2022). Access to electricity (% of population)—European Union. The World Bank. https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=EU

York, R., & Bell, S. E. (2019). Energy transitions or additions? Why a transition from fossil fuels requires more than the growth of renewable energy. *Energy Research & Social Science*, *51*, 40–43. https://doi.org/10.1016/j.erss.2019.01.008

Zein, L. F., & Setiawan, A. R. (2019). *General Overview of Ecofeminism* [Preprint]. Open Science Framework. https://doi.org/10.31219/osf.io/fmjgk

8. Appendix

Operationalization

Values	Keywords
1. Ecofeminist	Equality, nature as biosphere, well-being for people and nature,
values	bottom-up movements, low tech that is socially embedded,
	structural transformation of capitalist society, anti-consumerist
	lifestyle, social and ecological justice, care as human right,
	degrowth
1.1 Gender	When gender equality is included/ mentioned in the text, e.g., in
equality	form of tinkering, tailoring, transforming
1.2 Gender	When issues like energy poverty, affordability, energy consumption
specific	etc. are mentioned
issues	
1.3 Legal	When references to the Paris Agreement or other policy documents
basis	are made, that include gender equality in some way
2. Capitalist	Nature as resource/ investment opportunity, green growth, green
values	capitalism, firm-based, technological solutionism, green tech,
	decarbonization, consumerist lifestyle, capitalist elite networks as
	discourse-makers, efficiency

Coding Scheme

