Netherlands Case study

Users TCP Gender and Energy Task, Subtask 2

March 2024

Joy Clancy, Marielle Feenstra and Hanna Kreuger
1. Introduction

This case study is produced as part of the IEA Users TCP Research Programme: *Empowering all. Gender in policy and implementation for achieving transitions to sustainable energy*. It contributes to providing an understanding of the systematic inertias in the sociotechnical energy system that appear to be hindering the development and implementation of gender aware energy policies.

The case study focuses on a condition known as ‘energy poverty’ and how it is currently addressed in the context of the Netherlands. There is no universally agreed definition of energy poverty. However, it can be characterised by the inability of individuals or households not to have access to levels of energy service (such as a comfortable ambient temperature, cooking or lighting) in their homes (Simcock and Bouzarovski, 2023). Living in energy poverty is recognised as having severe impacts on a person’s health, wellbeing and quality of life, as well as leading to social exclusion. This issue was chosen not only because addressing energy poverty is one of the grand challenges of the energy transition but also because it is recognised that energy poverty has a strong gender dimension (Clancy et al., 2017). Women are more likely than men to live in energy poverty due to income disparities, they live longer and form the majority of single-headed households often with the responsibility for children. The energy price hikes that resulted from Russia’s war against Ukraine are likely to have made the situation worse for those already living in energy poverty and resulted in more people finding themselves struggling to pay their bills.

The case study looks how a condition known as ‘energy poverty’ and how it is currently addressed in the context of the Netherlands. There is no universally agreed definition of energy poverty. However, it can be characterised by the inability of individuals or households not to have access to levels of energy service (such as a comfortable ambient temperature, cooking or lighting) in their homes (Simcock and Bouzarovski, 2023). Living in energy poverty is recognised as having severe impacts on a person’s health, wellbeing and quality of life, as well as leading to social exclusion. This issue was chosen not only because addressing energy poverty is one of the grand challenges of the energy transition but also because it is recognised that energy poverty has a strong gender dimension (Clancy et al., 2017). Women are more likely than men to live in energy poverty due to income disparities, they live longer and form the majority of single-headed households often with the responsibility for children. The energy price hikes that resulted from Russia’s war against Ukraine are likely to have made the situation worse for those already living in energy poverty and resulted in more people finding themselves struggling to pay their bills.

The case study looks how a condition known as ‘energy poverty’ and how it is currently addressed in the context of the Netherlands. There is no universally agreed definition of energy poverty. However, it can be characterised by the inability of individuals or households not to have access to levels of energy service (such as a comfortable ambient temperature, cooking or lighting) in their homes (Simcock and Bouzarovski, 2023). Living in energy poverty is recognised as having severe impacts on a person’s health, wellbeing and quality of life, as well as leading to social exclusion. This issue was chosen not only because addressing energy poverty is one of the grand challenges of the energy transition but also because it is recognised that energy poverty has a strong gender dimension (Clancy et al., 2017). Women are more likely than men to live in energy poverty due to income disparities, they live longer and form the majority of single-headed households often with the responsibility for children. The energy price hikes that resulted from Russia’s war against Ukraine are likely to have made the situation worse for those already living in energy poverty and resulted in more people finding themselves struggling to pay their bills.

The case study looks how a condition known as ‘energy poverty’ and how it is currently addressed in the context of the Netherlands. There is no universally agreed definition of energy poverty. However, it can be characterised by the inability of individuals or households not to have access to levels of energy service (such as a comfortable ambient temperature, cooking or lighting) in their homes (Simcock and Bouzarovski, 2023). Living in energy poverty is recognised as having severe impacts on a person’s health, wellbeing and quality of life, as well as leading to social exclusion. This issue was chosen not only because addressing energy poverty is one of the grand challenges of the energy transition but also because it is recognised that energy poverty has a strong gender dimension (Clancy et al., 2017). Women are more likely than men to live in energy poverty due to income disparities, they live longer and form the majority of single-headed households often with the responsibility for children. The energy price hikes that resulted from Russia’s war against Ukraine are likely to have made the situation worse for those already living in energy poverty and resulted in more people finding themselves struggling to pay their bills.

The case study looks how a condition known as ‘energy poverty’ and how it is currently addressed in the context of the Netherlands. There is no universally agreed definition of energy poverty. However, it can be characterised by the inability of individuals or households not to have access to levels of energy service (such as a comfortable ambient temperature, cooking or lighting) in their homes (Simcock and Bouzarovski, 2023). Living in energy poverty is recognised as having severe impacts on a person’s health, wellbeing and quality of life, as well as leading to social exclusion. This issue was chosen not only because addressing energy poverty is one of the grand challenges of the energy transition but also because it is recognised that energy poverty has a strong gender dimension (Clancy et al., 2017). Women are more likely than men to live in energy poverty due to income disparities, they live longer and form the majority of single-headed households often with the responsibility for children. The energy price hikes that resulted from Russia’s war against Ukraine are likely to have made the situation worse for those already living in energy poverty and resulted in more people finding themselves struggling to pay their bills.
The transition are distributed in a society across three dimensions which provide an analytical framework: distribution, procedural and recognitional. A gender lens is applied to the framework, to provide a more nuanced understanding of how the energy transition may unevenly distribute benefits, costs and risks, thereby producing new inequalities or exacerbating existing ones. This analysis can be taken a step further by using an intersectional approach that disaggregates data across different groups without prioritising one category of social difference, such as income levels (Yuval-Davis 2016).

The case study starts with a brief description of the structure of the governance landscape in the Netherlands. This is followed by data on households living in energy poverty with some information about the strategies people adopt to reduce their energy bills as well as offering explanations for why some people take no steps to reduce their bills. Getting an accurate measure of the number of households living in energy poverty as well as an understanding of their lived realities is proving challenging for the government. Nevertheless, there are attempts to move people out of energy poverty. Section 3 describes the policies and organizations that are involved in addressing energy poverty and the measures they are taking are outlined in Section 4 which are analysed from an energy justice perspective through a gender lens. The last section provides some recommendations starting with the premise that you need good data as the basis of a gender just energy policy.

2. The Dutch governance landscape

The Dutch governance landscape can be characterised as having a multi-level structure in which the legally responsible body at the different levels is given jurisdiction over different areas of land, each body has its own set of governance functions and competences, and they are in constant processes of negotiation, creating institutions and reallocating decision-making powers (Hooghe and Marks, 2003; Jeffery and Peterson, 2020). At the lowest level are the 342 municipalities, which are grouped into 12 provinces with the national government based in the Hague. The way in which policy is formulated and implemented has been evolving. There has been a move to increasingly use decentralized multi-level governance structures in which common goals are set and tasks are divided across layers and between state and non-state actors (Kern and Bulkeley, 2009). Such a reorientation of competencies in respect of the issue to be addressed which had primarily been resident at the national level now requires the expansion of local expertise. At each level, there are increased interactions between government and non-governmental actors with a move to more specialised or sector-based governance (Bache et al., 2016). So, the vertically-oriented structure now has a horizontal dimension to facilitate public-private partnerships and cooperation with civil society organisations.

In terms of energy governance, a third layer has been added at the regional level, in which 35 regions have been mandated by the national government with powers to make decisions

---

1 Distributive justice identifies the sites of injustices in the energy system (access to energy services; labour markets; governance (multi-level)). Procedural justice starts from the premise that all groups and stakeholders have the right to participate in decision making, and that their views should be treated with respect. Procedural justice links to recognitional justice that acknowledges divergent perspectives based in social, cultural, ethnic, racial and gender differences and that people should be fairly represented and free from physical threats (see Jenkins et al. 2016).
on decarbonisation options within their region.

Since the Netherlands is a member of the European Union (EU), this adds a further layer of governance at the supranational level which has an influence on national policies to meet international commitments, such as covenants and European legislation. Membership of the United Nations also influences policies, for example, requirement to contribute to meeting the Sustainable Development Goals (SDGs).

### 3. Energy Poverty in the Netherlands

The Netherlands shows a low incidence of energy poverty compared to most other EU countries when it is measured using the headline indicators of the European Energy Poverty Observatory (EPOV) (EPOV, 2021). The National Energy and Climate Plan cites that 2.6% of Dutch households could not, in 2016, afford to adequately warm their homes, while approximately 2% were in arrears with energy bills (NECP, 2019). However, these data do not give a complete understanding of the lived experiences of these households. About 11% of the Dutch population meet the EPOV high energy expenditure indicator. Nevertheless, while this percentage of the population is low compared to other EU countries, the burden is not distributed equally across the Dutch population. The two lowest income deciles make up 20% and 58% of the sample reported as living in energy poverty (EPOV, 2021). There are also differences depending on the nature of ownership of a dwelling. Up to 16% of families living in social housing (with regulated rent) had difficulties heating their homes, while up to 7% of households in the lowest income deciles experienced arrears. People develop coping strategies to keep their bills down, for example, heating only certain rooms in the house, switching the heating on for a limited number of hours each day, changing their sleeping hours, limiting visits from family members (Stojilovska et al., 2021). Some people’s stressful living conditions (such as a recent divorce, illness, having to care for a family member with a physical or mental illness) can render them unaware of energy use and energy bills or with any feeling of the need to act. There are other factors which contribute to the challenges of having an adequately heated living space, such as the lack of finance to buy newer, more energy efficiency appliances or the physical structure of the building where they live in which rooms are cold, draughty and mouldy.

A study by the Netherlands Environmental Assessment Agency (PBL) (PBL, 2018) using a different set of measures found that up to 13.6% of Dutch households were experiencing financial difficulties paying bills which was linked to the amount of their disposable income available for paying their energy bills. Most of those households were renting and their income was below the median. An interesting finding by the study was that they were unable to account for approximately 900,000 households (13% of all Dutch households) attributed to the nature of their residence (e.g., students, or people living in unusual dwellings, such as houseboats, or multi-occupancy dwellings) for which there are no insights into these households living conditions. There are other households which appear not to be exceeding an energy expenditure ratio as a portion of their income because they actively reduce their energy consumption. However, if they were assessed using another measure known as the “payment risk” which is defined as if after paying housing and energy costs their budget is insufficient to cover minimum subsistence expenditures, there would be more households classified as energy poor.
One of the factors that makes it difficult to give an accurate picture of lived experiences of energy poverty or to make comparisons between municipalities is that three Dutch Government Agencies (Netherlands Environmental Assessment Agency (PBL\(^2\)), Central Bureau for Statistics (CBS) and Netherlands Organisation for Applied Scientific Research) (TNO\(^3\)) use different definitions of energy poverty. While it is possible to disaggregate to some extent the energy poverty data for the Netherlands, it is very limited and data using characteristics which are recognised as contributing to energy poverty vulnerability, including gender, age, migration background, disability and family size, are lacking (Clancy et al., 2017). Households are fluid systems too: coparenting and multi-generational households, while part of today's social reality, are not reflected in official data (Clancy et al., 2017). Eurostat (2021) data show that, compared to other households, single mothers and their children are more likely to live in houses with poor fabric that leads to poor energy efficiency (leaking roofs, damp walls, floors or foundations, or rot in window frames or floors). Older women who live alone are more vulnerable to energy poverty compared to men in the same age group due to differences in pensions (Clancy et al., 2017). Women's longer life expectancy means that they will be left paying the energy bill themselves (Eurostat, 2019).

4. Energy Governance in the Netherlands addressing energy poverty

The national policy framework for the energy transition makes no mention of energy poverty. This situation has put the Dutch Government in a difficult position in respect of EU policies. Legislation has been introduced which legally obliges all Members States to develop a "set of criteria" for defining energy poverty, as well as assessing the number of households which meet these criteria and to develop objectives and policies to address the situation [(Regulation (EU), 2018/1999; Directive (EU), 2019/944); Commission Recommendation (EU) 2020/1563]. As the preceding section shows, the metric used to measure energy poverty brings different numbers. In addition, governments are required to report on the situation in their NECPs for which the Dutch government has been criticised for failure to comply.

However, the Dutch Government’s policies related to decarbonisation do create possibilities to help those people living in energy poverty. Since the country has natural gas reserves, the government heavily subsidised gas for households, with the consequence that 83% of Dutch households are using natural gas for heating and cooking. However, as a contribution to decarbonisation, the aim is, by 2030, to convert 1.5 million Dutch households (20% of the total) from using natural gas to a different energy source for heating and cooking (NECP, 2019). Since this will involve major infrastructural interventions in people’s homes, it enables retrofitting measures in residential buildings and potentially improving the quality, such as insulation, with energy saving benefits. Several government bodies at the lower governance levels have used these opportunities to address energy poverty.

Five provinces are stimulating and funding research about energy poverty, as well as supporting the projects and programmes of the municipalities within their jurisdiction. For

---

\(^2\) Planbureau voor de Leefomgeving

\(^3\) Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek
example, the province of Utrecht is working towards a just energy transition and has allocated a budget of €8.9 million, which includes funding projects which provide renovation solutions for households living in energy poverty.

Most of the work to address energy poverty is carried out by the municipalities. This responsibility has its origins in the change in the Dutch governance structure when, in 2010, the passing of the “Participation Law” resulted in municipalities gaining extensive responsibilities for social service provision and poverty alleviation, including tailoring policy solutions to meet their households’ needs (Dijkhof, 2014). Municipalities are also responsible for implementing social welfare policy (Straver et al., 2020) which has put them in the position, through their engagement with socially vulnerable groups and poverty eradication initiatives, of being acutely aware of the phenomenon of energy poverty (ENGAGER, 2019). They are alerted by energy suppliers about people struggling financially and they collaborate closely with debt assistance agencies, food banks, and other local welfare organizations (Kreuger, 2023). They see that addressing energy poverty contributes to meeting simultaneously both social welfare policy and climate change goals. However, the absence of a national framework, the lack of a clear mandate and adequate resources to address energy poverty constrain the efforts of municipalities. These deficiencies also have an impact at the regional level. The RESs plans for the energy transition do not currently address energy poverty (Feenstra et al., 2021).

Nevertheless, municipalities have been creative in finding funds that can, at least in part, be used to address energy poverty. The city of Groningen is planning an Energy Transition Fund using the revenues generated by renewable energy farms based on municipal land. The provinces Utrecht and South Holland (VNG, 2017) are helping municipalities within their jurisdiction with their energy poverty initiatives.

5. Addressing energy poverty

The causes of energy poverty are many and varied. Yet the way the problem is framed can result in not all causes being addressed and if it is too narrow the gains of achieving multiple objectives can be missed. For example, if energy poverty is framed as a social welfare problem, in the Netherlands this would align with the remit of the Ministry of Social Affairs and Employment (SZW) covering social welfare and employment. However, improving the energy efficiency of residential buildings, which can help alleviate energy poverty, as a contribution to the energy transition would be part of the remit of the Ministry for Economic Affairs and Climate Policy (EZ). Unfortunately, there is little collaboration between ministries which misses out on opportunities to find sustainable solutions to energy problems. Providing financial support to help with energy bills can provide some relief for households but its impact on reducing CO2 emissions is doubtful, particularly if a rebound effect comes into play. Policy implementation only soften the effect without addressing the underlying causes.

While it is positive that the municipalities are at least attempting to do something about energy poverty, there are negative aspects to their endeavours. The lack of a framework and uniform action, allows for a range of solutions which differ per municipality (Bouzarovski &
Tirado Herrero, 2017; BZKa, 2022; Harmsen, 2022). These differences can lead to spatial injustices, for example, one municipality provides water-saving shower heads while another finances washing machines. Even though the solutions can be tailor-made reflecting local and contextual factors (Feenstra et al. 2021), the measures currently in place seem to be short-term, technical and, mostly, financial (Kreuger, 2023). This raises questions about the capacity and expertise of someone working at the municipal level who does more than merely carry out explicit, detailed instructions (Bertelli, 2016) but designs and implements the policy interventions which will have multidisciplinary aspects both in terms of the causes of and solutions to a problem. In the context of addressing energy poverty, a research study in the Netherlands, reported that interviewees who worked for municipalities indicated that at times there was a lack of capacity (Kreuger, 2023). Policy workers can operate in an ambiguous and complex space (Considine, 1994; Gualtieri, 1999) which is certainly the case when addressing energy poverty. In an ideal world, they start by identifying the problem, they evaluate the available options (which can involve consultation with objective experts who can provide evidence), they decide on a course of action and move to implementation (Shortall, 2013). From an energy justice perspective, consultation should involve not only people regarded as experts (such as energy engineers and social workers) but also ‘ordinary citizens’ particularly those living in energy poverty. A range of methods, such as surveys, think tanks, or workshops, are available to engage with the public who are a repository of knowledge about lived experiences, such as energy poverty, and their solutions.

However, policy workers are (as yet!) human beings and they have personal beliefs and values which subconsciously influence their decision making. The same holds for the other people involved in policymaking, be they experts or the public, in terms of their advice and knowledge sharing with the policy maker. The policy making process can also be influenced by existing connections (within and between governmental institutions – including at the national level) (Wilkinson et al., 2010), although these may not always function effectively.

There are a range of causes of energy poverty which are gendered so policy responses need to be gender responsive and just which requires policy makers to be gender aware. Dutch energy poverty data is not gender disaggregated (Feenstra, 2021), so we have no idea about the exact number of Dutch women who are energy-poor. The ‘best guess’ is that 1 out of 5 households classified as energy poverty is single-parent (Pelgrim, 2023) and, based on official data, it is not unreasonable to assume that these are predominantly women (CBS, 2007; CBS, 2017). Procedural justice would require the involvement of all stakeholders, including those people living in energy poverty, in the creation and implementation of a gender just energy policy (Sovacool et al., 2016; Feenstra, 2021). Criticism has been made of the lack of representation of a range of stakeholders in the types of organisations which could be consulted by municipality policy workers (Jenkins et al. 2016). A shift towards a more representative cohort in municipalities is a recent human resources policy change, in which a master’s degree is no longer a requirement for a policy worker, although it remains to be seen whether this influences decision making (Kreuger 2023). There are some researchers who argue that a critical mass of women is needed to influence policy, although there is no consensus as to the size of this mass (see for example, Kanter, 1977; Dahlerup, 1988; Bratton, 2005). There are counter arguments that
say that the presence of women in influential positions is no guarantee of gender just policy (Childs and Krook, 2009) while others add that it places all the obligations on women’s shoulders and men can avoid responsibility (Clancy, 2016). An exploratory study as to whether the mind-sets of municipal policy makers working on energy poverty influenced their preferred solutions did find some differences, for example, some considered addressing energy poverty was not the municipality’s responsibility but other actors, such as housing corporations (Kreuger 2023). On other issues there was a consensus, for example, solutions for energy poverty should coincide with solutions to other social issues which can be seen as contributing to a gender just policy.

6. Recommendations

The current understanding of the extent and nature of energy poverty in the Netherlands is limited due to the nature of the data collected which reduces the likelihood of a gender just energy policy. The indicators rely on metrics which underestimate the social consequences of energy poverty (TNO, 2020). An effective measuring and monitoring of the multidimensional nature of energy poverty requires a multi-indicator framework with indicators that can identify both the causes and effects of energy poverty (Trinomics, 2016; Clancy et al., 2017). These indicators can help reach multiple overlapping policy objectives such as a reduction in emissions, increased living comfort and health benefits although this requires a move from silo policy development to more aligned targets and responsibilities for example, housing, health and social welfare. Qualitative indicators also have a role to play to monitor the experiences of people living in energy poverty. Using qualitative data gathering methods, such as longitudinal interviews and focus groups, formed from a cohort of a diverse group of households, helps broaden the influence on the formulation of policies to address energy poverty by giving municipal policy makers a more nuanced understanding of the lived realities (ENGAGER 2020).

The data needs to be presented both sex-disaggregated and intersectionally to reflect the social characteristics of the Dutch population.

7. References


https://www.volkshuisvestingnederland.nl/onderwerpen/aanpak-energiearmoede


