

2GENDERS

Generation and Gender ENergy DEprivation: Realities and Social policies

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ABSTRACT

This research is dedicated to energy poverty in Belgium. Following Bouzarovski and Petrova (2015: 36), energy poverty is defined as a poverty of energy services. Energy services include space and water heating (or cooling), cooking, lighting, using information and entertaining technologies, and so forth. Energy service poverty is namely caused by the inefficiency of the building stock and by problems faced by households to afford the energy consumption that is considered normal in a given society. This research was realised in 2014-2018.

Context

In Belgium, inequalities are increasing, as the proportion of people at risk of poverty indicates: from 14.5% in 2008, it reached 16.3% in 2017.¹ On the other hand, energy prices are also increasing: for residential consumers, the final price of natural gas is higher by 2.5% between January 2007 and December 2016.² It is thus relevant to study energy poverty in Belgium.

Indeed, access to energy and the services it provides can become insecure, with very negative effects on wellbeing, threatening the dignity and decent existence that are named as fundamental entitlements in the 2000 Charter of fundamental rights of the European Union (European Parliament, Council and Commission, 2000). Furthermore, energy poverty lies at the crossroads of many sustainable development goals (SDG) that were adopted by the United Nations General Assembly in 2015, namely SDG 1: no poverty, SDG 7: affordable and clean energy, SDG 10: reduced inequalities, SDG 13: climate action. Other SDG are also at stake, as this report will show: good health and well-being (SDG 3), gender equality (SDG 5), sustainable cities and communities (SDG 11), responsible consumption and production (SDG 12), as well as peace, justice and strong institutions (SDG 16).

Objectives and research questions

The acronym of this research, 2GENDERS, stands for “Generation and Gender ENergy DEprivation: Realities and Social policies”. It shows the objectives of this research that were translated into four research questions:

1. Who are the households living in energy poverty in Belgium and what are the generation and gender aspects of this phenomenon? (RQ 1)
2. Do persons living in energy poverty experience other fragilities, especially regarding relationships, mobility, and self-reported health? (RQ 2)
3. What are the daily practices of persons living in energy poverty, especially those related to energy consumption, and what meanings do they give thereto? (RQ 3)
4. How can we translate the voice of people living in energy poverty and experiencing other fragilities into policy recommendations? (RQ 4)

Methods

This is a mixed-method research (Tashakkori & Teddlie, 1990), meaning that both quantitative and qualitative methods were used, here in parallel. Beside the literature overview (Chapters 2 and 3), quantitative and statistical analyses were performed on large databases for Belgium from multiple-countries surveys (SILC and GGP) in Chapters 4 and 5. Based on 60 in-depth interviews with persons living in energy poverty in the three Belgian Regions, and on a participant observation in the Brussels Region, qualitative approaches offer a comprehensive picture of what a daily life under energy poverty means (Chapter 6), with a zoom on social work and energy guidance (Chapter 7). These last two Chapters

¹ The At-risk-of-poverty rate is defined as the share of people with an equivalised disposable income (after social transfers) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers. Source:

https://ec.europa.eu/eurostat/cache/experimental_statistics/income-inequality-and-poverty-indicators/Flash-estimates-2018-Country-profiles.html

² <https://www.comparateur-energie.be/blog/2017/11/03/prix-gaz-belgique/#evolution>

provided inputs to deliberate political recommendations designed to tackle energy poverty (Chapter 8).

Results and conclusions

In the pursuit of ecological transition, Amartya Sen's theory of capabilities (1999, 2009) provides a first step to think about justice, and therefore, about energy poverty. Energy is not necessarily the condition for a good and happy life (Sen), any more than the environment is an inexhaustible resource (Jonas). A second step proposes to combine Sen's theory with Castoriadis' thoughts on individual and social imaginary and his non-liberal conception of freedom and autonomy to build a framework within which a democratic pathway for transition is possible. (Chapter 3).

RQ 1. The answer to this group of research questions first requires defining who is in energy poverty in Belgium. There is no official definition of energy poverty in Belgium, as opposed to France for example. In this situation, and as underlined in Chapter 4, the prevalence of energy poverty in Belgium varies considerably according to the criteria used to define which household or what person is in energy poverty. The proportion of households in Belgium that are in energy poverty ranged in 2012 from 0.2% (households disconnected for electricity – the figure is the same for those disconnected for gas) to 14.0% in “measured energy poverty” (targeting households dedicating too high a proportion of their budget to energy costs) as well as 4.6% in “hidden energy poverty” (targeting households dedicating too low a proportion of their budget to energy costs). A further criterion is being granted a social tariff: for their electricity consumption, 8.2% of households had such a benefit in 2012, and 8.5% for gas. Thus, the proportion of households living in energy poverty depends on the point of view taken: either a policy approach – the so-called “beneficiaries” of a given policy instrument – or on a normative point of view, for example on a correct way to spend the household income.

In Chapter 5, still another approach is followed and is based on the experience and opinions reported by surveyed persons in a large quantitative survey (the Generation and Gender survey). We classify the respondents to this survey as energy poor if they report that for their household, it is either very difficult, or difficult, or rather difficult to make ends meet AND that they have affordability problems to keep the house adequately warm, or they have had arrears in paying their utility bills in the last 12 months, or they have both problems. Energy-poor households represent 10.3% of the households in 2009. Unfortunately, this figure cannot be updated as no similar survey has been undertaken in Belgium since then. For these households living in energy poverty, the mean income is rather low (1164 € per month, in 2009) but their socio-economic characteristics described in Chapter 5 are varied and heterogeneous. Regarding the gender and age of the surveyed person of households living in energy poverty, there are proportionally much more women (60.3%) than men (39.7%), and the mean age of these respondents is younger (46.1 years) than in the other categories of our typology on affordable warmth.

In energy poor households, the main living arrangements are the following. More than one fifth of these households are made of one man living alone, and the same proportion of one woman living alone (the latter is likely to be underestimated, see details in Chapter 5); 29% of the energy-poor households include a couple, with or without dependent child(ren); one-parent families represent nearly one household out of seven energy-poor households (14%), the large majority (90%) of these lone-parent families being headed by a mother (note that the dependent person(s) may also be a grand-child, or sibling(s) of the respondent); and finally, another 14% of these energy-poor households are found in the three other types of living arrangements (two adults; other types of households with no dependent person; other types of households with at least one dependent person). Still in 2009, a comparison by gender and age group of the respondent has shown that for the respondents living alone, the likelihood of living in energy poverty is similar for men and women if their age is less than 60 (16% under 40, 18% between 40 and 59), and is higher for women after 60. For the

women in one-parent families, the likelihood of being in energy poverty is highest if they are aged under 40 (35%), and is far from being negligible after that age (21% between 40 and 59 and 14% after 60).

RQ 2. Social isolation, mobility problems, as well as health problems including poor well-being are associated with living in energy poverty – associated with, not necessarily caused by energy poverty or a consequence thereof, because our approach is systemic rather than causal. People living in energy poverty are experiencing several other types of fragilities, called “uncapabilities” in Chapter 5 following the capability concept developed by Sen and Nussbaum. These associations seem to operate most often in vicious circles, thus reinforcing each other. One important finding of Chapter 5 is that these uncapabilities arise for energy-poor households in more areas than expected, namely for the uncapability related to material property and interestingly enough, for the uncapabilities related to recreational activities (“Play”) and to culture (“Senses, imagination and thought”). Culture indeed enables the development of another social imaginary, in the terms of Castoriadis (1987), that could be more just and less energy demanding, thus more in line with low-carbon energy systems. Households living in energy poverty are also very unequal to the energy-richest households in their capabilities related to emotional management and to health and protein intake.

The 60 in-depth interviews with people in energy poverty (analysed in Chapter 6) support in multiple ways these results. Energy poverty shrinks the physical space, both at home – only one room heated – and outside the home: weak access to private or even public transportation, and furthermore, feelings of shame and of stigmatisation (as also shown in Chapter 7). This “spatial shrink” (following the expression of Liddell and Morris, 2010: 2993) is also a “mental shrink” caused by anxiety and other negative emotions. Many interviewees continuously have to count the money left, if any, until the end of the month. This anxiety, as well as feelings of emptiness, loneliness, sadness and powerlessness are reported by a good many among the interviewees in our qualitative survey (Chapter 6) as well as among those surveyed by the Generation and Gender Programme (Chapter 5). People living in energy poverty have the impression of facing an uncontrolled and unjust world, which leads to an increasing feeling of low self-confidence.

RQ 3. People living in energy poverty have reported many self-restriction practices especially heating curtailment, and pragmatic strategies to prevent suffering from a lack of heating (using kerosene lamps, caulking doors and windows, wearing extra clothes, leaving home to go to public places to get warm). According to the interviewed persons, these self-restrictive practices have a large impact on the standards of living of the whole family. Parents feel compelled to reduce their own well-being by applying severe restrictions related to food, health, furniture, appliances, and leisure but they are strongly affected when these restrictive practices affect the well-being and daily life of their children whom they try to preserve (Chapter 6). The in-depth interviews also show coping strategies, which are alternative to adaptive competences, such as involving the help of their entourage, their relatives, and various social public or private institutions for building new solutions. For instance, they get help from energy suppliers in negotiating plans for arrears in energy bills, or they apply new advice for energy savings and teach it to their children. With their entourage, people give and receive help for better well-being, such as food, clothes, or time for child caring. It can also be collective help for retrofitting the dwelling of a neighbour.

Chapter 7 reports on a 3-year participating observation in the Brussels Region among social workers and beneficiaries of social welfare. Seeking personal recognition and seeking a valued home, (non-) use of social services, file fatigue, and alternatives for a fair accompaniment of persons in energy poverty command this analysis of the energy landscape in this Region.

RQ 4. Nine recommendations conclude the report. They are related to energy policy (federal and regional level), housing policy (mainly regional level), and social integration (federal and

municipal level). They were inspired by the analysis of the in-depth interviews and of the fieldwork and were discussed with the members of the users' committee.

Keywords

Energy poverty; capability deprivation; self-restriction practices; in-depth interviews; policy recommendations.

PART 1: INTRODUCTION AND CONCEPTUAL FRAMEWORK

1. INTRODUCTION

Françoise Bartiaux

This report presents the results of a comprehensive research on energy poverty in Belgium. One of the main achievements of this research was to find sixty persons or households living in energy poverty who accepted to tell their daily life to the researchers. What does it mean to live in and cope with energy poverty in Belgium in 2014-2017 (when most of the in-depth interviews were realised)? Let me already give voice to these people:

“Because it’s badly insulated, we can heat all we want, it’s never really warm. (...) And in the bathroom, we’re obliged to put an electric heating. (Short pause) Because otherwise, we’ve to turn the gas heating for three hours (insists) for the room to be a little bit (insists) warm” (Alice, lone-mother, employed, in her thirties, tenant in a social housing, Brussels Region).

“The Public Centre for Social Welfare in [his city] suggested me, as well as the social housing company, to start a condemnation procedure, in order to get priority for social housing. I was informed of the risk that nine times out of ten, it would not be accepted, and I could become homeless.” (Paul, single man, unemployed, 50-64, tenant in the private market, Flemish Region).

“Sometimes there are bills that I do not pay because I could not even afford it and I prefer to have money to nourish my son, to pay my rent, and to have a roof over my head.” (Brigitte, lone-mother, unemployed, aged 35 to 49, tenant in a social housing, Walloon Region).

Energy poverty is about poor dwelling conditions, unhealthy housing and fear of being homeless, as well as scarce budget and sometimes, debts.

Energy poverty is also about severe self-restriction practices, health problems, and stress for the children or for the risk of being homeless, or sued in Court:

“I have already been hungry but I give priority to my son, I do everything to make him not hungry” (Brigitte, lone-mother, disabled, age between 25 and 49, tenant in a social housing, Flemish Region).

“I was very ill at one point and I made a lot of bronchopneumonia, I had to go to the hospital (...) I say that it is due to the heating problems that I had previously. Even now I am still paying the consequences (...) in addition, my daughter is disabled, I’m afraid that it falls on her too.” (Catherine, lone-mother, unemployed, in her forties, tenant in a social housing, Walloon Region).

“We’re always afraid too because, well, as madam [the energy adviser] told us, there are pieces of the front wall that are deteriorated and might fall. We’re always afraid, because if one day it falls on somebody and if that person sues us in court, we might have a great deal of money [to pay] ...” (Lucie, widowed with her adult child and grandchild, unemployed, in her sixties, owner, Brussels Region).

And energy poverty is also about shame and social isolation, even for the children:

“How do you expect me to invite someone to eat in an apartment where I have been already asking [the landlord] for a flush [of the toilet], where there is moisture everywhere? (...) How can I invite someone in?” (Anna, single, unemployed, in her forties, tenant on the private market, Walloon Region).

“I’ve had a prepayment meter at first, but I found it really horrible. Boy, we really had to... I even kept the children home from school since they could not take a shower. You don’t have hot water eh, and all those stuff... You have to charge it.” (Martine, lone-mother, working, in her fifties, tenant in a private dwelling, Flemish Region).

In Belgium, inequalities are increasing, as the proportion of people at risk of poverty indicates: from 14.5% in 2008, it reached 16.3% in 2017.³ On the other hand, energy prices are also increasing: for residential consumers, the final price of natural gas is higher by 2.5% between January 2007 and December 2016.⁴ It is thus relevant to study energy poverty in Belgium.

Indeed, access to energy and the services it provides can become insecure, with very negative effects on wellbeing, threatening the dignity and decent existence that are named as fundamental entitlements in the 2000 Charter of Fundamental Rights of the European Union (European Parliament, Council and Commission, 2000). Furthermore, energy poverty lies at the crossroads of many sustainable development goals (SDG) that were adopted by the United Nations General Assembly (2015), namely SDG 1: no poverty, SDG 7: affordable and clean energy, SDG 10: reduced inequalities, SDG 13: climate action. Other SDG are also at stake, as this report will show: good health and well-being (SDG 3), gender equality (SDG 5), sustainable cities and communities (SDG 11), responsible consumption and production (SDG 12), and peace, justice and strong institutions (SDG 16).

This report presents the main results of a pluriannual research on energy poverty in Belgium funded by BELSPO, the Belgian Science Policy Office. The research was realised in 2014-2018 by three research teams from three Belgian Universities – the Université catholique de Louvain, the Universiteit Antwerpen and the Université de Mons – with the collaboration of the University of Birmingham in the United Kingdom. The research teams were multi-disciplinary by associating many competences from the social sciences: sociology, anthropology, philosophy, psychology, economics, demography, and social geography.

The objectives and research questions are presented in the next Chapter, as well as the state of the art, the methods used in this research, and the outline of this report.

³ The At-risk-of-poverty rate is defined as the share of people with an equivalised disposable income (after social transfers) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers. Source: https://ec.europa.eu/eurostat/cache/experimental_statistics/income-inequality-and-poverty-indicators/Flash-estimates-2018-Country-profiles.html.

⁴ <https://www.comparateur-energie.be/blog/2017/11/03/prix-gaz-belgique/#evolution>.

2. STATE OF THE ART AND OBJECTIVES

Françoise Bartiaux, Rosie Day, Jill Coene

1. STATE OF THE ART

In the past few years, more and more research has been undertaken in the field of energy poverty, a phenomenon that was first analysed in the United Kingdom most notably by Brenda Boardman (1991) in her landmark book on fuel poverty. As mentioned by Bouzarovski and Petrova (2015) and Thomson, Snell and Bouzarovski (2017) in their more recent reviews, much research has been devoted to households living in energy poverty in the United Kingdom and in Ireland. Since 2005, energy poverty has at last been recognised as an important stake in continental Europe, both as an academic field of research and as an area for policy intervention.

There are many definitions of this phenomenon (e.g. Boardman 1991: 227; EPEE 2007: 5; EESC 2010:53; DTI (UK) 2001:6; Hills 2011:19; Dubois 2011:111); a review article analyses the definitions used in the United Kingdom and their implications for policy (Moore, 2012). Bouzarovski and Petrova (2015), and Day, Walker and Simcock (2016) have reviewed the numerous definitions of energy poverty. As put by Bartiaux, Vandeschrick, Moezzi and Frogneux (2018: 1220), “[b]oth reviews underline that the term ‘fuel poverty’ is generally used in Northern (and colder) countries while in less developed countries, the term ‘energy poverty’ is preferred and encompasses larger issues (e.g. governance, electrification...). But Bouzarovski and Petrova (2015: 37) conclude that their review “hint[s] at the theoretical obsolescence of the notion of ‘fuel poverty’, even if the concept is widely recognized in policy and scientific circles”. They propose instead a concept of “energy service poverty”. They argue that, in a given context, energy service poverty is caused by problems of access to infrastructure and affordability depending on the energy mix and its “conversion to ‘useful’ energy”, which in turn raises the issues of efficiency and flexibility. This ‘useful’ energy provides the households with various energy services (such as space and water heating, cooling, drying and so forth): these energy services are then structured and normalised by norms and needs for energy that shape household final demand (Bouzarovski and Petrova, 2015: 36)”.

In Belgium, the first important research on the topic was conducted by Huybrechs, Meyer and Vranken (2011) who defined energy poverty as: “the situation where a person or a household encounters particular difficulties in his/her dwelling to satisfy his/her elementary energy needs” (p.6). For Huybrechs et al. (2011), the causes of energy poverty are manifold: a low income, an energy inefficient home and rising energy prices are among the key factors. These factors are interrelated: people with small budgets often live in energy inefficient homes due to exclusion from the decent housing market (Ceulemans & Verbeeck, 2015). Rising energy prices also have a bigger influence on people with small budgets (Dumortier et al., 2006). The knowledge and some behaviours of people may be other factors, as well as using old, energy consuming electrical appliances or using an expensive energy source (like electrical heating) (Huybrechs et al., 2011). Here too, the relation with income is clear (for example, due to budgetary restrictions, poor people are more likely to have old electrical appliances that are less energy efficient). A strong winter and/or a colder climate zone are other influencing factors, like the fact that some people spend more time at home during the day (e.g. pensioners, unemployed people) (Huybrechs et al., 2011). Furthermore, the energy landscape is very complex, which makes it difficult for people to find their way. Although more and more people switch to a cheaper supplier, many still stay with their traditional supplier, even if this supplier has less favourable tariffs. (See for example Middlemiss & Gillard, 2015.)

Energy poverty is a cause of great concern for both households and governments. Living in cold and/or damp home impacts on health (e.g. respiratory or cardiovascular problems) and

causes 'excess winter deaths' (e.g. Wilkinson et al., 2001). People in energy poverty sometimes have to resign themselves to "choosing" between 'heat or eat' (Bhattacharya et al., 2003, Frank et al., 2006, Beatty et al., 2014). Energy poverty also has an impact on mental health (like stress and mental disorders) and social relations (Hills, 2012, Thomson, Snell & Liddell, 2016). Therefore, governments in the EU are recently paying more attention to energy poverty (Thomson et al., 2016).

In Belgium, some information is already known about the prevalence of energy poverty, thus from a quantitative point of view. The federal and regional regulators of the electricity and gas market (CREG at the federal level, CWaPE in Wallonia, Brugel in the Brussels Region, VREG in Flanders) presents yearly statistics and studies (see for instance CREG, 2011), such as the number of households getting into trouble with their energy bill and/or instalment plan, the number of households that are reliant on the grid operator for energy delivery, the number of households with a prepayment meter for gas and/or electricity and the number of gas and electricity cuts. However, these statistics only present a partial picture. From the literature it is known that some people restrict their energy consumption in order to limit their bills (e.g. Wright, 2004) or that people with prepayment meters consume according to their budget instead of according to their needs or wants (e.g. O'Sullivan, 2008). This 'hidden' energy poverty is not tackled by the traditional statistics. This gap is covered by the King Baudouin Foundation and its 'energy poverty barometer' based on EU-SILC data (Delbeke & Meyer, 2015, Coene & Meyer, 2019, Meyer et al., 2018). A 2019 study of the CREG also refers to different types of energy poverty (CREG, 2019). A review of the different estimations of the prevalence of energy poverty is provided in this report (Chapter 4). In this research, quantitative analysis is also undertaken to investigate gender and generation characteristics of energy poverty in Belgium, as well as associated difficulties regarding wellbeing, access to culture and leisure that are experienced by persons living in energy poverty (Chapter 5).

Before the present research, much less was known about how people deal with a situation of energy poverty in their daily life from the point of view of these persons living in energy poverty. In the international literature qualitative research on energy poverty is more common (e.g. Brunner, Spitzer & Christanell, 2012; Day & Hitchings, 2009; Harrington et al, 2005; Maresca & Lacombe, 2015; Middlemiss & Gillard, 2015), but no such studies were undertaken in the Belgian context. Based on 60 in-depth interviews realised with persons living in energy poverty, the present study provides the reader with a scientific picture of energy poverty as experienced in Belgium (Chapter 6).

In recent years, research has linked the situation of energy poverty to the capability approach. Day et al. (2016) have synthesized the extensive research literature on the relationships between energy poverty and capabilities. The concept of capability has been developed during the eighties by economist A. Sen and philosopher M. Nussbaum (see among other: Sen, 1992; Nussbaum and Sen, 1993; Nussbaum, 2000; Sen, 2009). A capability is the possibility to live a good life as defined by the persons themselves in a reasonable way given their context of life. Therefore, the capability approach does not exclusively focus on the availability of means or on subjective well-being. Nussbaum (2000: 78–80) has established a list of ten capabilities that she holds as universal (contrary to Sen for whom capabilities are a person's effective freedom to live a valuable life within his/her own context). Nussbaum's ten capabilities concern: life of normal length; bodily health; bodily integrity; senses, imagination, and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment on both a political sense and a material one. Poverty is thus the deprivation of the capability to live a good life. As explained by Fitzpatrick (2014: 23), "Poverty is what Sen (2009, pp 245–60) calls 'capability deprivation'. Ultimately, what poor people are deprived of is the right to live lives of dignity, freedom and respect in which they possess the opportunities to fulfil their potential." The deployment or not of Nussbaum's ten capabilities by the persons living in energy poverty in Belgium and other groups of people is studied further in this report (Chapter 5). This

comparison of the level of capability deprivation between different social groups having different access to affordable warmth is inspired by the relational approach recommended by sociologist Fitzpatrick (2014). For him indeed, “our internal sense of worth [is shaped] in relation to others” (Fitzpatrick, 2014: 27).

In Western societies, social injustice is increasing both within and across countries and it needs to be related to global injustices, such as global warming (Bauman, 2013). In this context, it is likely that energy-related inequalities are also increasing.

2. OBJECTIVES

The 2GENDERS research focuses on energy poverty in Belgium, energy poverty being defined as poverty regarding energy services, as stated above and following Bouzarovski and Petrova (2015: 36). This research describes the phenomenon and the populations affected, ascertain the correlates of energy poverty on social relations, mobility and self-reported health, and design and deliberate possible interventions with a range of important stakeholders.

Particular attention is paid to gender and generational aspects of energy poverty. This is because there is good reason to believe both that energy poverty is not manifest equally between genders and generations – for example single mothers and older people may be more affected – and also that the correlates are not the same between genders and generations – for example health and relationship aspects are different between the old and the young. The final aim of the project is to provide policy makers with a set of theoretically and empirically informed policy options and recommendations to alleviate both the occurrence of energy poverty in Belgium. These research directions underlie the acronym of this research, 2GENDERS, for Generation and Gender ENergy DEprivation: Realities and Social policies.

The team to conduct this project is multidisciplinary, which is appropriate as understanding energy poverty and its correlates requires multiple lenses and the work involved needs numerous competencies. Also involved is an international partner from the United Kingdom, where energy poverty has been on the political and research agenda for over two decades.

The objectives of the 2GENDERS research are threefold: 1) to precisely describe this phenomenon of energy poverty in Belgium, the populations affected, namely their gender and generational aspects, the practices and meanings given by these populations; 2) to explore and analyse the other fragilities associated with energy poverty, in particular when it comes to relationships – including the relationships with social services and associations – as well as the deprivation in mobility, and self-reported health problems associated with energy poverty; and 3) to provide policy makers with a range of policy options and recommendations.

As also expressed in Chapter 6, we first used the term of ‘vulnerabilities’ for the difficulties and impairments associated to energy poverty. However, in the more recent and current academic literature on energy poverty, the concept of energy vulnerability is defined in a precise and causal way by Bouzarovski and Petrova (2015: 35) as “the factors that affect the likelihood of becoming poor” and when “combined with the systems of provision approach, energy vulnerability (...) [encompasses] the nature and structure of the home (...)”. Consequently, we use the term “fragilities” in this report.

3. RESEARCH QUESTIONS

These objectives were translated into four research questions:

1. Who are the households living in energy poverty in Belgium and what are the generation and gender aspects of this phenomenon?

2. Do persons living in energy poverty experience other fragilities, especially regarding relationships, mobility, and self-reported health?
3. What are the daily practices of persons living in energy poverty, especially those related to energy consumption, and what meanings do they give thereto?
4. How can we translate the voice of people living in energy poverty and experiencing other fragilities into policy recommendations?

4. OUTLINE OF THIS REPORT

This report has three parts. The first part introduces the topic of energy poverty in Belgium (Chapter 1, written by F. Bartiaux, coordinator of the 2GENDERS research and of this report) and exposes the conceptual framework of this research, its objectives, and its research questions (Chapter 2, written by F. Bartiaux, R. Day and J. Coene). This first part ends with a summary of a conceptual analysis published during this research. N. Frogneux, F. Bartiaux and C. Luyckx show, on the one hand, how Sen's idea of justice as situated within the concept of capability can be relevant for thinking on energy and environmental justice, while on the other hand, it is insufficient for thinking on ecological transition. They propose a conceptual framework within which a democratic pathway for transition is possible. For this, they suggest turning to non-liberal conceptions of freedom and to social imagination using C. Castoriadis' concept of autonomy. (Chapter 3).

The second and most important part of this report is devoted to the results that were obtained during this research and follow two main approaches used in social sciences: quantitative and statistical (Chapters 4 and 5), and qualitative (Chapters 6 and 7). From these chapters, subsequent recommendations are derived (Chapter 8). First, B. Delbeke, S. Oosterlynck, and C. Vandeschrick present in Chapter 4 various ways of measuring energy-poverty prevalence in Belgium, and the pros and cons of these different measures. The range of proportions of households in energy poverty, which the authors calculate, illustrates both the complexity of measuring a multi-dimensional phenomenon like energy poverty and the dependence of these measurements on the data used and their characteristics (availability, reliability, completeness, and so on). Next, Chapter 5 builds on the conceptual framework presented in Chapters 2 and 3 and offers a quantitative analysis on energy poverty and other fragilities that the authors (F. Bartiaux, C. Vandeschrick and N. Frogneux) call "uncapabilities". The authors propose an original typology of households on their access to affordable warmth, and with the Belgian data from the Generation and Gender Programme, they compare energy-poor households and other less-poor social groups. This comparison clearly shows a deprivation of capabilities associated with energy poverty in Belgium in more areas of daily life than presumed in the second research question: not only regarding relationships, health, and mobility, but also regarding access to culture and recreational activities, as well as the feeling of fulfilment and ontological security.

Beside these statistical analyses, another major endeavour of the 2GENDERS research was to collect, transcribe, analyse, and compare 60 in-depth interviews made with persons living in energy poverty (20 in each of the three Belgian Regions). The results are presented in Chapter 6 by A. Baudaux, J. Coene, B. Delbeke, F. Bartiaux, A. Siben, F. Fournier, É. Heymans, S. Oosterlynck, and W. Lahaye. Their analysis is supported by many quotes from these interviews. This analysis reports first on macro-level factors that may cause or aggravate the situations of energy poverty as experienced in the daily lives of the interviewees, such as a poorly-insulated housing stock, the costs and provision of energy, social trajectories shaped by shortages of employment and of low-cost housing, debts often triggered by life accidents, occasional fraud and malpractice by the housing owner, unscrupulous contractors, neighbours, or even energy companies, and high costs of living. Some of these high costs are caused by the fact that living in energy poverty entails more expenditures, such as higher energy consumption for old appliances. This chapter further reports on the everyday practices of energy poor persons: curtailment practices (namely by lone mothers) including severe self-restriction practices related to food and health, practices

when having a prepayment meter, cleaning practices (usually in vain) related to struggles with high levels of dampness in the home, and practices of 'getting by'. Other coping practices are then examined, ranging from dangerous alternatives to interpersonal solidarity and use of social services, namely for retrofitting the dwelling in the case of homeowners living in energy poverty. This important Chapter ends by the analysis of other fragilities associated with energy poverty, such as health issues, poor well-being, social isolation, and mobility problems. Throughout this Chapter, generation and gender aspects are studied.

A. Baudaux reports in Chapter 7 on her 3-year participating observation in the Brussels Region among social workers and beneficiaries of social welfare. Seeking personal recognition and seeking a valued home, (non-) use of social services, file fatigue, and alternatives for a fair accompaniment of persons in energy poverty command her analysis of the energy landscape in this Region.

This second and main part of the report ends with policy recommendations (Chapter 8, by B. Delbeke, A. Baudaux, F. Bartiaux, S. Oosterlynck, F. Fournier, and W. Lahaye). These recommendations were developed by the research teams with the in-depth interviews and their analysis in mind. They were further discussed and improved by the members of the users' committee. These recommendations would make an important difference to the lives of people in energy poverty and are related to energy policy (federal and regional levels), housing policy (mainly regional level), and social integration (federal and municipal levels). Concluding this research, its promoters (F. Bartiaux, S. Oosterlynck, W. Lahaye, and R. Day) first summarise its main findings in answering its four research questions, defined above, and then call for strong policies to fight energy poverty (Chapter 9). This second part ends with the list of references cited in this report.

The third and last part of this report is devoted to the dissemination and valorisation activities that were undertaken during this research, namely three workshops, one in each Region, to discuss the study results with social workers, and also to thank those who helped the research team find persons living in energy poverty who would accept to be interviewed (Chapter 11). Finally, the 15 scientific publications made during this research are listed (Chapter 12).

Overall, we hope that this research project will make a highly significant, concrete contribution to the wellbeing of Belgian society through the realisation of cutting edge, internationally informed research and in doing so, will contribute to the wider understanding of energy poverty in Europe by the development of ideas elaborated in the Belgian context.

3. ENERGY POVERTY: A CONCEPTUAL ANALYSIS

Nathalie Frogneux, Françoise Bartiaux, Charlotte Luyckx

Most theories of justice centre on the social, ignoring consideration of natural resources. Similarly, the energy question, often approached as a technical one, usually neglects related social and political issues.⁵ Amartya Sen's theory of capabilities (1999, 2009) provides a framework to think about justice as inseparably social and environmental by indicating a first step to the following question: how can the questions of energy justice (and therefore, questions of energy poverty) be integrated with the pursuit of ecological transition? This Chapter introduces a solution by combining Sen's theory with Castoriadis' thoughts on individual and social imaginary.

Indeed, to develop a more comprehensive perspective on energy justice than offered by the classical utilitarian point of view, Sen's theory of capabilities seems promising, because it allows us to think about our freedom other than as open and free access to resources for a good life. Capabilities may indeed be defined as the conditions that allow many different ways of life: one can think of what constitutes a valuable life and then find the means to achieve it, which does not necessarily require a great amount of energy to be actualised. This approach thus allows a decoupling of fundamental human needs and access to fossil fuel energy, a decoupling that moves us away from the concept of "fuel needs" that can be unmet, as implied by the term "fuel poverty".

For Amartya Sen, poverty is fundamentally seen in terms of a shortfall of basic capabilities. In addition, he distinguishes two dimensions of freedom: the possibility of working toward reasonable goals that we value, and the process of that choice itself. We call the latter the "empowerment process of the subject", channelling Castoriadis. Sen thus offers a notion of freedom apt to apply to the basic theory of energy transitions, without requiring a revolutionary and radically utopian project. First, according to the capability approach, reflection on environmental justice should privilege empirical comparisons of actual life circumstances and reject what seems unjust. Second, justice is comprised of many dimensions. Third, the conceptual pair of "capability – means of its accomplishment" is of special interest in avoiding a focus on false goals.

Sen's approach welcomes a plurality of visions of the good life while carefully respecting individual freedom. It allows us to pose the fundamental political question as focusing on the ends, rather than the means. This gives us the ability to broaden greatly the field of reflection for energy poverty, orienting it to an alternative vision of development.

Nevertheless, to be applicable to environmental problems, the capability approach seems too centred on social questions of human development, which is an abstraction of the "human condition" (Arendt, 1958). Furthermore, the capability approach appears to be too individualist in that the distinction between individual and collective freedoms is too vague, especially so in the current context of ecological limits, as namely exemplified by climate change and loss of biodiversity.

Democratic procedures of representation can appear too slow to address the urgent environmental situation society faces. Hans Jonas, who warned against the natural limits of our lifestyle as early as 1979, did not think that democracy could integrate ecological constraints, given its focus on short-term interests rather than intergenerational issues (Jonas, 1984 [1979]). But expertocratic approaches are also slow in convincing citizens to change their way of life (Hamilton, 2010) and not very effective in the long term since they do not transform the sense of responsibility nor social practices.

⁵ This Chapter briefly summarises the article of Frogneux et al. (2014), which was written during the 2GENDEERS research project. The authors deeply thank Dr Mithra Moezzi (Portland State University) for her help in summarising and translating that article.

To resolve this tension between wanting personal and collective freedoms despite shared ecological constraints, we must think of democratic freedom as being capable of self-limitation. We can then establish an entirely different way of designing our relationship to energy and the environment: energy is not necessarily the condition for a good and happy life (Sen), any more than the environment is a neutral and inexhaustible resource (Jonas). The condition of our autonomy must be understood in both senses of the word: both the means for possibility and the framework that limits it (Castoriadis, 1987 [1975]).

Indeed, in that book, Castoriadis proposes to think of both individual autonomy and collective autonomy as deploying themselves together. Therefore, any form of ecological transition requires democratic institutions, while for Castoriadis these democratic institutions are not the typical ones, but radical ones that are also a collective empowerment of society, that is to say a more just society. In a circular process, the individual imagination is both the product as well as the condition of the social imaginary. From this basis, individual action and collective action are based on individual and collective freedoms that create new and more just institutions for living together.

PART 2: METHODS, SCIENTIFIC RESULTS AND RECOMMENDATIONS

4. MEASURING ENERGY POVERTY IN BELGIUM

Bart Delbeke, Stijn Oosterlynck, Christophe Vandeschrick

1. GOALS AND METHODS

Scholars have long been searching for the most adequate measurement of fuel poverty. Notable contributions include Boardman's (1991) proposition to measure fuel poverty as an expenditure on energy larger than 10% of income, Hills' (2012) low income high costs indicator and Thomson and Snell (2013)'s more subjective method. In most of the attempts that have been made, there is a tendency to look for an average profile of the fuel poor, and therefore to look for one (composite) indicator. As energy poverty is a combination of low income, high energy expenditure and poor energy efficiency, any indicator of it will have to incorporate these three dimensions. To adequately measure the internally diverse phenomenon of fuel poverty, we have made use of a wide variety of data sources, from administrative data made available by official institutions (such as Ministries, distribution network operators and regulatory bodies on the energy market).

The methodological approach we pursued went as follows. First, we distinguished two types of methods: those that use personal judgements (self-perception method) and second, those that choose a monetary approach based on personal declarations on income and energy expenditure. Both approaches were reviewed and we compared the percentages of households living in energy poverty in Belgium according to these methods. We also investigated whether and how the various methods take into account self-restrictions to energy consumption. Next, the existing administrative data on social public service obligations were explored. They are compared with the results from the surveys as well as with one of the most important policy measures to reduce energy poverty in Belgium namely the social tariff to find out how many households benefit from this tariff and whether this number is sufficient to reach everyone in need. We then examined the possibilities for using consumption data to identify households living in energy poverty. Finally, we re-used the self-perception method but starting from a different database, namely the Gender and Generations Programme (GGP), to discover whether the various measures in different data sets converge.

2. DATA AND FINDINGS

2.1 Non-monetary survey based calculations

Most early papers on fuel poverty focused on non-monetary measurements, also called subjective measurements (e.g. the EPEE project, 2006-2009). Survey data, notably EU SILC, are commonly used to measure energy poverty. These surveys do not only contain data on expenditures, but also more subjective data, based on questions that ask people how they experience their situation. Three questions in the survey are suitable for the examination of energy poverty: 'Do you have affordability problems to keep the home adequately warm?', 'Do you have arrears on utility bills?' and 'Do you have a leaking roof, damp walls or rotten windows?'. The first question on affordability has some obvious strengths. It asks directly for energy poverty and the respondent's answer will include financial difficulties as well as bad functioning heating systems. It takes into account some hard to measure factors like hours of presence in the dwelling or the need for a higher energy demand due to illness. Indirectly, it also takes into account the dwelling's insulation or the absence thereof. However, this question also has its flaws. The notion of affordability is rather vague and can be interpreted in different ways. This interpretation might be based

on what people hear in the press about rising (or dropping) energy prices. The question also concentrates on warmth only - which is on average accountable for more than two thirds of the energy demand - but by doing so, it neglects other energy uses like lightning or the use of other electrical equipment.

The second question on arrears is defined more clearly. The answer depends only on the honesty of the respondent and the courage to admit these arrears face-to-face with the interviewer. One disadvantage is that it will often tell more on the procedures that are routine in a certain country or that are applied by a commercial supplier rather than reflect an inability to pay energy bills. Moreover, the question 'arrears of utility bills' also includes the supply of water. The third question about the state of the dwelling also leaves quite some scope for interpretation. It is a good indicator for the quality of housing, but there is not necessarily a strong relation with energy issues. A leaking roof will not cause or aggravate energy poverty and rotting windows may not be caused by a lack of heating, although they will require more heating. In addition to that, the three questions all have in common that there is no guarantee that poor households are identified since rich households can also have leaks or damp walls.

We updated Thomson and Snell's 'consensual approach' (2013), where the above-mentioned three EU SILC questions are used and then weighted into a composite measure. Thomson and Snell find that 7%, 5% and 18% of Belgian households answered positively, ranking it more or less in the middle in comparison with other Member States (Table 4.1). These percentages were given an equal weight (1/3) to end up with a composite figure of 9.8%.

Table 4.1. Share of households that suffer from a problem linked to energy poverty

	Afford	Arrears	Leaks	Composite figure
2007				
BE	7%	5%	18%	9.8%
EU (27)	12%	8%	18%	12.7%
2012				
BE	6.6%	6.1%	18.7%	10.5%
EU (27)	10.8%	9.8%	15.1%	11.9%
2013				
BE	5.8%	5.0%	18.1%	9.6%
EU (27)	10.7%	10.0%	15.7%	12.1%
2014				
BE	5.4%	5.8%	17.5%	9.6%
EU (27)	10.2%	9.7%	15.8%	11.9%

Source: Thomson & Snell for year 2007; Eurostat for years 2012-2014.

We applied this method on more recent data. As also shown in the table all three indicators remained quite stable in Belgium and in the EU as well. What did change was the relation with the average EU figure. For the affordability and arrears indicator Belgium (still) scores better than EU average. For 'leaks', which represents the condition of the housing stock, there was a negative evolution from average to more than two percentage points above it.

As we are interested in the proportion of households in energy poverty, it is useful to translate these three different indicators into a percentage (composite measure). To interpret the 'summary' indicator, it is important to know whether the different sub-indicators all capture the same population of energy poor that suffers from a combination of energy-poverty related problems or whether different populations suffer from different energy-related problems. As shown in Table 4.2, the latter is to a certain extent the case. A large group of 76% did not report any of the three energy poverty variables and is consequently not energy poor. For those who did report one or more problems, different profiles can be distinguished, corresponding to smaller subgroups. This means that the group in energy poverty is very

heterogeneous and it makes a huge difference whether households with one or more problems are chosen (cumulates to almost 24%) or households with all three problems combined (a surprisingly meagre 1%). We could argue that energy poverty embraces three distinct problems with little overlap, leaks being by far the main problem. For this reason, we believe that calculating a (weighted) average does not capture the phenomenon of energy poverty adequately.

Table 4.2. Proportion of households suffering from energy related problem(s) (2012)

One or more problems	Afford only	2.6
	Arrears only	2.6
	Leaks only	13.5
	Afford + Arrears	0.9
	Afford + Leaks	1.6
	Arrears + Leaks	1.6
	Afford + Arrears + Leaks	0.9
	Total	23.8
None of these 3 problems		76.2
Total		100.0

Source: EU-SILC for Belgium 2012, authors' own calculations.

As explained in detail in the next chapter, another index of perceived (or experienced) energy poverty was developed with the survey of the Gender and Generations Programme (GGP). In Belgium the only wave of GGP is centred around 2009, so for EU-SILC we took the same year in order to be able to make a comparison. The approach was rather similar to the one described above: all questions of the survey related to energy were used. The affordability and arrears indicators are present in both datasets, the leaks indicator however is missing in GGP. The definition of an energy poor household constructed in this research using GGP data is a household that is facing affordability or payment problems, and also has difficulty to monthly make ends meet. This last subjective question was added in continuity with Thomson and Snell's method as they find that this income perception variable is one of the best predictors of the three SILC energy-related variables (Afford + Arrears + Leaks); of course, the difficulty to monthly make ends meet makes it also possible to 'filter out' richer households, which cannot be defined as (energy) poor.

Note that the Belgian sample is made of 7163 respondents whose age varies between 18 and 80. So any estimation of the energy poor based on GGP data is an underestimation, for very old persons aged over 80, living alone or in couple, are not represented in this database. As several subpopulations had been underrepresented in the survey and other overrepresented, the sample used in this research has been weighted (see Chapter 5).

For 2009, that 10.3% of households are energy poor in the GGP database (with the caveat just mentioned) and 9.0% in the EU-SILC one. The exercise was also done for 2011 albeit for the EU-SILC only: 9.3%. We can conclude that the two datasets seem comparable (and suitable for further analysis) and that this percentage is relatively stable over time. These figures are very close to Thomson and Snell's composite index, although the two indexes used are quite different in two respects. First, in terms of method (averaging three proportions on the total sample is not the same thing as calculating the proportion of households combining a set of conditions). Second, in terms of variables used: both indexes focus on affordability and arrears, but the first uses an extra variable on housing conditions while the second has an extra variable on income. The advantage of the latter is that well-off households are filtered out. However, just like the first, no data on energy expenditure are considered.

The strength of the subjective method lies in its ability to incorporate hard to measure items such as presence in the dwelling, higher needs (e.g. due to illness) or malfunctioning heating systems. An important shortcoming is that the subjective questions that are used to collect data are prone to interpretation. Households might falsely not identify themselves as fuel poor, and the opposite: rather well off families considering themselves as energy poor. This can be partially resolved: by taking into account the question on making ends meet, we tried to deal with this. This solution is not fully satisfactory since this question remains subject to judgment. Another disadvantage, closely related to the previous, is that under-consumption is not taken into account. This means that a household can state that there are no financial problems, while the expenditure is too low for an acceptable level of warmth and energy in the dwelling. To address this problem, the results should be complemented with expenditure data.

2.2 Expenditure/monetary survey based calculations

The subjective questions that were used in the early days surely had their merit, but they were sensitive to much interpretation by the respondents. Therefore, a measurement of energy poverty should be as objective as possible. Monetary data on income and expenditures can help to objectify a vague term as affordability. We started from a previous research on the Energy Poverty Barometer (Delbeke & Meyer, 2015). The Barometer is calculated with EU-SILC data and is based on the following principles: excluding 50% highest incomes, comparing the consumption with a certain threshold and making a distinction between two groups. As for the latter, the first group consists of households for whom the total energy costs take a big share of their income (after housing costs have been deducted from the household total budget). This is comparable to Boardman's 10%-rule, but an actualization has been made: in 2011 the median household spent 7.4% on energy.⁶ So the threshold, which is twice the median, becomes 14.7%. Whenever a household spends more on energy than 14.7% of its budget, it is in a situation of measured energy poverty (Table 4.3).

Table 4.3. Median expenditure on energy in % of total available income, threshold and share of households in measured energy poverty, by Region (2009-2011)

	2009	2010	2011
Median	7.1	6.8	7.4
Threshold (2*median)	14.2	13.7	14.7
Belgium	14.2	14.2	14.6
Flanders	10.7	11.0	10.5
Wallonia	20.0	19.5	19.5
Brussels ^a	13.9	13.5	17.6

Source: Delbeke and Meyer (2015: 6).

A second group has chosen or felt that they had no other choice than to restrict themselves in order to limit energy expenses. This behaviour will not lead to high energy bills and therefore this household will not be included in the measured energy poverty indicator as described above, and possibly neither in indicators counting instalment plans or prepayment meters. Yet this too is a type of energy poverty. To address this issue a reference for 'normal usage' has to be made. This will be influenced by household type and size, country, culture, age, health, hours spent in the dwelling during the day, and so on. Since the data were not available for all these variables, another approach had to be chosen. There is a range of options available to determine this level of 'normal' consumption: an absolute minimum level covering vital needs only, the most frequent level, the mean, or the median. The latter was chosen because the median fits best the 'generally accepted living standards' and because it

⁶ To calculate the median, all households were considered (not only the 50% lowest incomes).

has arithmetic advantages over the most frequent level and the mean. For each household an estimation was made based on two variables: the household size and the dwelling size (using the number of rooms as a proxy). If a household consumes less than half of the estimation corresponding to its two characteristics, it is called to live in hidden energy poverty. It should be clear that unlike the measured energy poverty there is not one unique threshold, but a set of different thresholds determined by household and dwelling sizes. Of course, not every household consuming less than half of its 'reference' is in trouble. In some cases the low usage is perfectly explicable and these should not be counted as hidden energy poverty. Households that declare to have roof, floor, wall insulation and double glazing are excluded as well as households with a second residence. For 2011, potentially 3.4% of all households limited their usage. An overlap between households in measured and households in hidden energy poverty is theoretically possible, but in this case negligible since only one out of 6000 observations in the sample met both conditions (Table 4.4).

Table 4.4. Share of households in hidden energy poverty (2009-2011)

	2009	2010	2011
Median	4.7% ^a	4.5% ^a	3.4%

^a Calculated for information, not exactly comparable to 2011.
For 2009-2010 no information was available on insulation.

Source: Delbeke and Meyer (2015: 8).

It is striking that the advocates of both the subjective and objective methods use their technique to incorporate under-consumption or self-restriction. We would argue that the objective method is superior on condition that when actual energy spend is used (which implies that only households that spend too much on energy are counted as energy poor) an additional indicator is developed (to detect households that spend not enough). A possible way to do so is to use required energy spend, which necessitates detailed data on housing condition to calculate what is the required fuel spend to keep a household out of energy poverty. Unfortunately, this type of data is not available (yet). The Energy Poverty Barometer calculations are based on household and dwelling size, which is more correct.

The objective method, and more specifically the 'measured energy poverty' indicator of the Energy Poverty Barometer, potentially identify some households as being in energy poverty because they have high expenditure caused by using a lot of energy on relatively unnecessary things, e.g. sunbeds, or heating to 25° 24 hours a day, etc. The discussion about what is necessary and what is not is not straightforward and is related to the social definition of a good life (Bartiaux et al., 2011). And one could ask whether these luxury articles like sunbeds or Jacuzzis can be found in the five lowest income deciles. It can be expected however that households with low incomes have more often energy consuming appliances, and whether necessary or not, a high bill is problematic from an ecological as well as from a social point of view. This justifies that every high expenditure, whatever the cause, is taken into account.

Another reason to use an objective method is to objectivise affordability. Using income as a proxy for a household's financial capacity is a step in the right direction, but still has its flaws. Research based on surveys is dependent on the accuracy of people's answers and the willingness to share sensitive information. Moreover, income is not the only determinant of the financial capacity. Capital and property play a role as well. A way to solve this is to cross the survey data with fiscal databases and property registers (not existing in Belgium). Beside the challenge of getting accurate wealth data there are some survey-technical issues that should be resolved. In Belgium it is usual to pay a fixed monthly amount in order to avoid a huge bill at the end of the year. It is not clear whether the given amounts are (monthly) advances or real expenditures based on the final bill. Moreover, amounts in euros are only a proxy for energy use expressed in kilowatt hour (kWh) since tariffs are not available in the dataset and they can vary. This 'noise' on the data only matters for hidden energy poverty:

households with low tariffs (like social tariff for certain groups, see 2.3) will be overrepresented whereas households with disadvantageous tariffs will not be counted. To solve these issues it is necessary to go beyond the EU-SILC data.

2.3 Administrative data on social public service obligations and social tariffs

Administrative data address some of the shortcomings of survey data. They comprise the whole population (and not just a sample of it) and they are not based on estimations by energy users. The administrative data available to measure energy poverty are for examples data on prepayment meters, power limiters, social tariffs and households cut off from the grid, which are made available by official institutions. However, two drawbacks exist: most of the available statistics deal only with natural gas and electricity. Furthermore, if we want to know the situation in a complex federal state as Belgium, we have to collect the figures on different administrative levels since a large part of energy policy is decided and implemented by Regional public bodies. Some examples further on will illustrate the consequences of this way of gathering information. It is possible e.g. that all Regions deliver figures on the same topic, but legislative contexts are different. Or, if one Region has no data on a certain theme or year, a total cannot be calculated.

What can be learned from these figures shown in Table 4.5? 0.18% of all households in Belgium have been disconnected from the grid in 2013. Behind this national figure, there are some regional differences: for electricity for example, above 2,000 households on a total of 2.7 million (0.07%) had been disconnected in Flanders. Wallonia, with 1.5 million households a smaller Region, stands for more than 6000 disconnections (0.4%). Households can get disconnected after a procedure of default only. Disconnection is the ultimate step in this process. It is clear that every disconnection that was not caused by a situation of unsafety or houses being empty, should be included in any energy poverty index. But energy poverty cannot be reduced to the number of disconnections.

Table 4.5. Overview of indicators about energy poverty, 2011-2013 (in %)

Indicator	Unit	Total	2011	2012	2013
'Afford' ^a	Persons	All Persons	7.1	6.6	5.8
Afford' ^a	Households	All Households	7.3	6.8	
Arrears' ^a	Persons	All Persons	6.0	6.1	5.0
'Arrears' ^a	Households	All Households	5.3	4.9	
'Leaks' ^a	Persons	All Persons	21.2	18.7	18.1
'Leaks' ^a	Households	All Households	21.3	17.9	
Thomson & Snell's Approach (Updated) ^b	Persons	All Persons	11.4	10.5	9.6
Combination of problems (1 or more) ^b	Persons	All Persons	27.1	23.8	
Energy Poverty (SILC) ^b	Households	All Households	9.3	8.8	
Energy Poverty (GGP) (figure of 2009!)	Households	All Households	9.1	n.a.	n.a.
Energy Difficulty ^c	Households	All Households	14.7	n.a.	n.a.
Barometer - Measured EP ^d	Households	All Households	14.2		14.0
Barometer - Hidden EP ^d	Households	All Households	3.4		4.6
Disconnections Electricity ^e	Households	All Households			0.2
Disconnections Gas ^e	Households	All Households Gas			0.2
Prepayment Meter or Power Limiter Electricity ^e	Households	All Households Electricity			2.6
Prepayment Meter Gas ^e	Households	All Households FI+W Gas			2.1
Social Tariff Electricity ^e	Households	All Households Electricity		8.3	8.2
Social Tariff Gas ^e	Households	All Households Gas		8.5	8.5

Sources: ^a Eurostat; ^b authors' own calculations based on SILC with equal weight for the 3 variables;

^c May (2013); ^d Delbeke & Meyer (2015); ^e authors' own calculations based on different national and regional statistics from regulatory bodies.

A better alternative is to look at prepayment meters. In Flanders, only households supplied by the grid manager can have a prepayment meter. In Wallonia, also customers of a commercial supplier can opt for a prepayment meter. Brussels has no prepayment meters for electricity, only power limiters, and no prepayment meter for natural gas. This illustrates how the measurement of energy poverty is made complex by regional variations in institutional context. Nevertheless, in all cases it indicates that there is a problem with the payment and/or supply of energy, which justifies using the label of 'energy poverty'. This exercise shows that 2% to 2.5% of the households has either a prepayment meter or a power limiter. The number of prepayment meters can be seen as an absolute minimum value to quantify energy poverty.

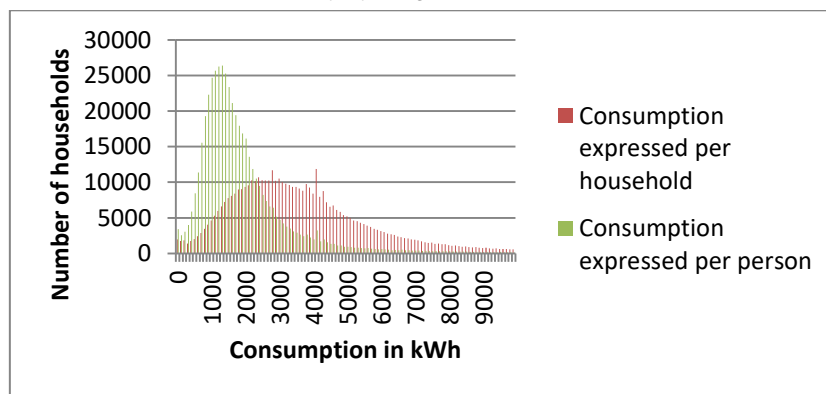
It is interesting to compare the numbers and estimations of households in energy poverty we have presented so far with the number of households entitled to the so-called social tariff. This policy measure helps people or families to pay their utility bills. It procures favourable tariffs for gas and electricity for some specific categories of energy users. Energy suppliers are compensated for the lower tariffs by the federal government, which finances this operation by taxing all other non-eligible households. The following categories are eligible: 1) those entitled to a specific allowance of the Public Centre for Social Welfare (e.g. a minimum income), 2) the disabled, 3) those getting a specific allowance of the Public Service for Pensions or 4) social tenants in a building with collective heating. We find that more than 8% of all households are entitled to this beneficiary tariff. This is far more than the number of disconnections or prepayment meters, but less than some estimations of people in energy poverty made above.

2.4 Consumption data

A fourth method to measure energy poverty, namely to make use of Distribution Network Operator (DNO) data, has not been explored so far. It is a special form of administrative data. It will not solve many of the aforementioned measuring problems, but nevertheless has some potential. The biggest advantage in comparison with survey data lies in its preciseness (no estimations (in euro) by respondents, but measured energy usage (in kWh) and its completeness (in principle all households are included, not only a sample⁷). As we will show in this paragraph consumption data alone will not be sufficient to identify energy poverty. It is necessary to cross them with other databases containing household characteristics and energy efficiency performances.

Distribution Network Operator data is detailed information about consumption. It exists for natural gas and electricity. We could have access to a dataset kindly delivered by Infrac, a smaller DNO operating mainly in Flanders. It contained the usage of gas and electricity of nearly 500 000 connection points. Figure 4.1 shows the graphical representation of this data.

Figure 4.1. Consumption of electricity by Belgian households (per slice of 100kWh) in 2015



⁷ Except those households that decided to go off grid. We suspect this number to be rather small, but have no official figure to confirm this.

Source: Raw data by Infrac (2015) and authors' own calculations.

We chose to focus on electricity firstly because practically every household uses it (in contrast of natural gas). Secondly because for electricity we also knew the number of persons per household since this DNO was obliged (until 2015) to give a free amount of kWh in function of the household size.⁸ The median consumption was almost 3500 kWh per household.

We expected to be able to notice some clear cut off points that would reveal excessive energy usage or abnormal under-consumption, but as one can see this graph (red bars) shows a gradual distribution of consumptions levels, a continuum with no clear gaps up- and downwards. When we express this in function of household size (green bars) it does not change the picture. Energy poverty is caused by a variety of factors like high prices, low income, bad housing conditions and so on. Since the DNO dataset focuses only on one item, consumption, it is not a surprise that it cannot lead to an accurate estimation of energy poverty.

3. COMPARISON BETWEEN DIFFERENT INDEXES

From the four types of data discussed above (non-monetary survey data, monetary survey data, administrative data and consumption data) today only two can be linked to each other. In this section, the proportions of households living in energy poverty calculated according to the method of the Energy Poverty Barometer (mainly monetary survey data) are compared to the corresponding proportion that is called perceived-experienced energy poverty (non-monetary survey data). The comparison was made for 2011, the year for which we had the most indicators available.

3.1 Measured energy poverty and perceived-experienced energy poverty

As a reminder, 14.2% of all Belgian households in EU-SILC were labelled 'in measured energy poverty', which means the expenditure for energy is too high compared to the household budget. When using the definition of experienced energy poverty, the share of households is 9.3%. Table 4.6 shows how these two definitions relate to each other.

Table 4.6. Relation between measured EP and experienced EP in 2011

In measured EP, and not in experienced EP	56%
Both in measured and experienced EP	13%
Not in measured, but in experienced EP	31%
Total in measured or experienced EP	100%

Source: EU-SILC 2011, authors' own calculations.

The groups identified by an objective versus a subjective measure are different. The intersection between them is remarkably small. There are different possible explanations for this: either the Barometer labels households as living in energy poverty whereas in fact they do not suffer, or households have lowered their standards and declare they can cope with daily energy needs even though in reality the indoor temperature is low and paying monthly bills is difficult. This illustrates the complexity of measuring a phenomenon like energy poverty.

3.2 Hidden energy poverty and perceived-experienced energy poverty

Hidden energy poverty was defined as 'a household consumption that is less than half the median of all comparable households, and it amounts to 3.4%. Not surprisingly this small proportion cannot influence the overlap between the two measures, as shown in Table 4.7.

Table 4.7. Relation between hidden EP and experienced EP in 2011

⁸ This measure existed only in the Flemish region, from 2002-2015.

In hidden EP, and not in experienced EP	25%
Both in hidden and experienced EP	5%
Not in hidden, but in experienced EP	69%
Total in hidden or experienced EP	100%

Source: EU-SILC 2011, own calculations.

This means that an objective measure based on an excessive expenditure, even when completed with a measure that detects under-consumption, cannot replace the self-perceived energy poverty. It is important for policy makers to keep this in mind.

5. ENERGY POVERTY AND ‘UNCAPABILITIES’: A QUANTITATIVE APPROACH

Françoise Bartiaux, Christophe Vandeschrick, Nathalie Frogneux

1. DATA AND METHODS

1.1 Data

It was a challenge to find a database that allowed simultaneously measuring both energy poverty and Nussbaum’s capabilities at the household level. A satisfactory answer to this challenge was found in a large-scale quantitative survey conducted under the Generation and Gender Programme (GGP). This Programme coordinates such surveys in Belgium as well as in 17 other European countries, Australia and Japan. The questionnaire is standardised across the participating countries and covers various aspects of daily life, including household composition, family relationships, self-perceived health, values, labour force participation, and sources of income. Most questions used in this research could be answered by either a yes/no response or a response on an ordinal scale (such as: never or very rarely; sometimes; rather often; always or all the time), e.g. for the questions on mental wellbeing.

In Belgium, the survey was implemented in 2008-10 by the Belgian Federal Institute of Statistics and a commercial company. At least 220 duly trained surveyors carried out face-to-face interviews. More details on the fieldwork are given by De Winter et al. (2011). The Belgian sample consists of 7163 respondents ranging in age from 18 to 80. There was one respondent per household, creating a sample of households. This sample does not include elderly persons aged over 80 living either alone or in a couple (or group) where all members were over 80 years old. These first two types of households represented respectively 4.47% and 1.03% of the total number of households in Belgium on January the 1st, 2008. There is no possibility of overcoming this limitation of the sample. However, we did weight the sample, since several subpopulations were underrepresented in the survey and others overrepresented (see also Nicaise and Schockaert, 2014). Household weights were derived in two stages. First, we weighted according to residence in the three Belgian Regions, and the gender and age group of the household member who happened to be selected to be part of the sample. Second, we applied weights according to household structure. The corresponding population figures were found in an interactive database developed from the National Register (Cytise, 2017). We used Excel to calculate these weighting coefficients.

1.2 Methods

To proxy each capability listed by Nussbaum (2000), we chose a group of about 3 to 5 questions asked in the GGP survey. A few capabilities could not be operationalised with this survey. We cross-tabulated these variables and the typology defining access to affordable warmth; this typology is presented below, as a first result. All proportions are reported below. Unless otherwise specified, all chi-squared (χ^2) are significant at $p < 0.001$. To do these tests, the relevant variables were recoded into dummy variables and scaled in the same direction.

A new statistical index that we call a variability index is then calculated as follows for each capability so operationalised. First, for each of the five categories of the typology defining access to affordable warmth, we compute the arithmetic mean of the proportions of the variables proxying the capability under study. Second, we calculate the arithmetic difference between the average proportions obtained for the energy poor and the energy richest, and then divide this difference by the mean of these two values. So, for this variability index, dividing the range by the mean annihilates the influence of the levels of order of magnitude exhibited by the variables used to operationalise the given capability.

In the last section of this chapter, we ask whether in terms of capability deprivation, energy-poor households differ from poor households receiving a social aid. To answer this research

question, we perform one-way variance analyses for each variable contributing to define a capability (displayed in Table 5.4 below); pairwise multiple comparisons are done with Bonferroni test to see which means significantly differ (at $p < 0.05$).

2. RESULTS

2.1 A households' typology according to the access to affordable warm

A first important result is the construction of a typology of households according to their access to affordable warm, in order to implement the relational approach recommended by Fitzpatrick (2014).⁹ To measure energy poverty prevalence in European countries, Thomson and Snell (2013) combine 3 variables: (1) affordability problems to keep the home adequately warm; (2) arrears on utility bills; and (3) inefficient dwelling (leaking roof, damp walls or rotten windows), drawn from the European Survey on Income and Living Conditions (EU-SILC) databases.

In the Generation and Gender Programme (GGP) database, the first two questions were also asked¹⁰ – whereas the third one was not. The first question on affordability indirectly refers to the physical characteristics of the dwelling (e.g. insulation or its absence). The two variables (affordability and arrears) are highly correlated ($\chi^2 = 48.67$, significant at $p < 0.0001$), as Table 5.1 shows. 1.5% of the surveyed households have problems with both affordability and arrears while 14.9% have a problem in one of the two.

Table 5.1. Affordability of keeping the home adequately warm by arrears to pay utility bills

Can you afford keeping your home adequately warm?	Arrears at any time during the past 12 months to pay as scheduled utility bills, such as for electricity, water, gas...?			
	Yes		No	
	%	N	%	N
Yes	7.8%	542	83.6%	5854
No	1.5%	102	7.1%	494

Note: $\chi^2 = 48.67$, significant at $p < 0.0001$.

Sources: GGP survey, Belgium, 2009; Bartiaux et al. (2018: 1232).

Of course, arrears may occur for other reasons than financial difficulties (such as distraction, long absence...), so a proxy of these financial difficulties should be added in the typology's construction. Furthermore, Thomson and Snell (2013: 571) "argue that there are a number of key defining features of fuel poverty; location [in rural areas], housing quality, and income". Income is proxied by these authors as difficulty in having ends meet, a question that is also asked in the GGP survey. So, we have used that question on self-perception of income; this variable like the one of affordability problems to keep the house adequately warm, match well with the relational approach. This question is formulated as: "Thinking of your household's total income, is your household able to make ends meet"?

Table 5.2 shows how these three variables are related. Among households having arrears, around the same proportion (one fifth) finds it either very difficult, difficult, rather difficult or rather easy to make ends meet given the total income of their household. The same does not hold true for the possibility of affordable warmth, where problems are mainly found among households finding it rather difficult or rather easy to make ends meet. The same

⁹ While elaborating our typology on access to affordable warmth, numerous checks were done for the chosen variables regarding the 'doesn't know' answers, as well as the refusals to answer (that were both coded as missing values) in order to be certain that there was neither overlap nor situations forgotten in our typology. Checks with crude numbers were also performed by cross-tabulations to control that the numbers of households found in each subcategories were correct.

¹⁰ "There are some things many people cannot afford even if they would like them. Can I just check whether your household can afford keeping your home adequately warm, supposing you wanted [that]?"; and "Has your household been in arrears at any time during the past 12 months that is unable to pay as scheduled utility bills, such as for electricity, water, gas...?"

Table 5.2 also indicates that among all sampled households, 28.9% perceive themselves¹¹ as having difficulties to make ends meet without having energy-related problems – arrears or difficult access to affordable warmth. This points at the necessity to further study these households perceiving themselves as (very/rather) poor. The energy justice paradigm (Walker and Day, 2012) heuristically raises here the question to know whether this self-perception of being poor is recognised in social politics and entitles these households (or one of their members) to special allowances.

Table 5.2. Arrears to pay utility bills and affordability for keeping the home adequately warm according self-perceived income.

Thinking of your household's total income, is your household able to make ends meet	Arrears: yes		Adequately warm: no		Both		None	
	%	N	%	N	%	N	%	N
Very difficult	21.9	119	12.3	62	63.4	64	2.9	169
Difficult	20.0	109	17.4	88	19.8	(20)	8.5	497
Rather difficult	22.4	122	24.1	122	13.9	(14)	17.5	1021
Rather easy	18.8	102	21.5	109	1.0	(1)	34.0	1984
Easy	13.4	73	19.0	96	2.0	(2)	29.7	1732
Very easy	3.5	(19)	5.7	(29)	0.0	(0)	7.5	436
Total	100%	544	100%	506	100%	101	100%	5839

Notes: $\chi^2=1233.60$, significant at $p < 0.0001$. Figures in parentheses refer to subsamples smaller than 30.

Sources: GGP survey, Belgium, 2009; Bartiaux et al. (2018: 1232).

To describe the complex Belgian social security system is out of the scope of this Chapter. We wanted here to focus on the poorest households receiving a publicly funded aid when all other social protections¹² are officially deemed insufficient. The financial and non-financial assistance considered here¹³ are thus granted as a last resort and after an enquiry made by a social worker of the municipal centre for social action where the household has its residence, which also raises the attention to the procedures to check (some would say to control) these entitlements. The households granted one of these aids make for 9.4% of the households perceiving themselves as having difficulties to make ends meet without having energy-related problems. This proportion does not mean that the other 90.6% are wrong in perceiving themselves as having financial difficulties, because unemployment allowances or poor-health related benefits may be very/rather low.

With these findings, we define the following five categories of our typology on access to affordable warmth and indicate their proportion in the GGP sample used here (with its representativeness limitations pointed at in the data section above, namely the fact that households made of one or two (or more) elderly persons all aged over 80 are not sampled):

1. *Energy-poor households* represent **10.3%** of the sample: they report that it is either very difficult, or difficult, or rather difficult to make ends meet AND that they find themselves in one of the three following situations: they have affordability problems to keep the house adequately warm, or they have had arrears in paying their utility bills in the last 12 months, or they have both problems;
2. *Aided poorest households (2.3%)* report that it is either very difficult, or difficult, or rather difficult to make ends meet AND that they receive financial aid or advice from

¹¹ $(169+497+1021)/5839=28.9\%$

¹² So, we have not taken into account the family allowances (given to one parent for each child under a certain age) nor the unemployment benefits nor the benefits related to a permanent inability to work for health conditions.

¹³ The aids considered here are the following: the 'income for integration', and/or during the last 12 months, either a financial aid (to help pay the rent, or the heating costs, or for the self-employed, his or her contribution to the social security system), and/or a no-financial aid (advice for managing the household's budget, possibly for indebted households, or juridical advice), and/or for the elderly aged 65 and over, a complement to their pension. This last allowance is managed by the pensions' office.

- publicly-funded municipal centres BUT they have no energy-related problems (neither affordability problem nor arrears);
3. *Other self-perceived households as poor (21.9%)* report that it is either very difficult, or difficult, or rather difficult to make ends meet BUT they do not receive financial aid nor advice from publicly funded municipal centres AND they have no energy-related problems (neither affordability problem nor arrears).
 4. *Energy-vulnerable households (3.4%)* report that it is either rather easy, or easy, or very easy to make ends meet BUT they find themselves in one of the two following situations: they have affordability problems to keep the house adequately warm, with or without arrears in paying their utility bills in the last 12 months;
 5. *Energy-rich households (62.2%)* report that it is either rather easy, or easy, or very easy to make ends meet AND they find themselves in one of the two following situations: they have no affordability problems to keep the house adequately warm, with or without arrears in paying their utility bills in the last 12 months.

These five types of households are portrayed according to different socio-economic variables (Table 5.3) and with a focus on generations, gender and living arrangements (Table 5.4).¹⁴

Economic and financial characteristics are first displayed in Table 5.3 below: 16.1% of the energy-poor households receive a last-resort social aid; as specified in our typology, the poorest households are granted such an aid, and the other self-perceived 'poor' are not. Nearly half of those poorest households have a total income under the poverty threshold, which is a higher proportion than for the energy-poor households (29.6%). This non-linear trend is also found for the average monthly income.

Furthermore, and as expected, the education level shows proportionally more less educated people in the first three groups.¹⁵

Regarding the area of residence and the dwelling, around 60% of the energy-poor households and of the poorest households are living in urban areas, and the corresponding figures in rural areas are respectively 17.2% and 13.8%. Thus, energy poverty in Belgium is also found in rural areas that also include villages and residential neighbourhoods with small gardens in front of each house (figures not shown). The poorest households who are granted a last resort aid are more often tenants (65.1%) than the energy-poor households (58%); in comparison, only 23.4% of the energy-vulnerable households rent their dwelling, and 19.9% among the energy richest. In rural areas, half of the energy-poor households own their dwelling (38% in urban areas, and 46.5% in semi-urban areas). It would thus be a mistake to portray energy-poor households as urban (42% are not) or as tenants (the same proportion, 42%, are not).

The intention to move is a proxy of the satisfaction about the dwelling and the respondents living in energy poverty are the most numerous to have such an intention (37.3%), as compared to those called 'energy vulnerable' or 'energy rich' (about 17.5%). However, for the energy poor, to find another dwelling is very difficult given the tensions on the housing market, as the next chapter will document.

The main differences between energy-poor and energy-richest households regarding the building type are found for those living in a four façades house (19.3% against 43.5%) and in an apartment located in a building with a lift (25.2% against 8.4%).

Summing up, our typology that is mainly based on self-perceptions related to access to affordable warmth adequately defines five different subpopulations of households, with the

¹⁴ Unless otherwise specified, all chi-squared (χ^2) and F are significant at $p < 0.001$.

¹⁵ Note that this education level and the age are those of the respondent who was selected to answer the interview and whose age was at least 18 at the time of the survey, which means that s/he was not necessarily the 'head of household' or 'the reference person' of the household.

energy-poor households sharing the worst socio-economic characteristics with the poorest households that are aided with advice and/or financial help granted by a publicly-funded service. The latter thus indirectly confirm the self-perceptions of the former.

Table 5.3. Socio-demographic description of the five types of households defined by our typology on access to affordable warmth (%)

	Types of households according to their access to affordable warmth				
	Energy Poor	Poorest (last-resort social aid granted)	Other self-perceived 'poor'	Energy vulnerable	Energy richest
<u>With a last-resort social aid granted</u> (% in this households' type according to its access to affordable warmth)*					
Yes	16.1	100.0	0.0	4.6	3.3
No	83.9	0.0	100.0	95.4	96.7
<u>Under the poverty threshold</u> , as calculated by the GGP survey (% in this type of households according to its access to affordable warmth)					
Yes	29.6	47.9	18.1	11.2	6.1
No	70.4	52.1	81.9	88.8	93.9
<u>Mean monthly income</u>	€ 1164	€ 1149	€ 1278	€ 1964	€ 1788
<u>Education</u> (% in this type of households according to its access to affordable warmth)					
None, 6 or 9 years of schooling with the corresponding diploma	49.2	58.7	43.0	28.1	26.9
12 years of schooling with the corresponding diploma	32.5	29.0	33.3	28.9	32.2
BA, Master or more	18.2	12.3	23.7	43.0	40.9
<u>Type of area of residence</u> (% in this type of households according to its access to affordable warmth)					
% urban	58.4	60.4	47.3	55.3	39.9
% semi-urban	24.4	25.8	34.2	37.6	42.7
% rural	17.2	13.8	18.6	7.2	17.4
<u>Property status</u> (% in this type of households according to its access to affordable warmth)					
% tenants	58.0	65.1	40.5	23.4	19.9
% owners	42.0	34.9	59.5	76.6	80.1
<u>Intention to move</u> (% in this type of households according to its access to affordable warmth)					
No	62.7	70.4	79.0	82.3	82.6
Yes, because of the cost or the quality of the dwelling	14.5	(6.6)	5.4	(5.5)	3.1
<u>Type of dwelling</u> (% in this type of households according to its access to affordable warmth)					
House, 4 façades	19.3	20.9	28.7	39.2	43.5
House, 3 façades	16.0	17.7	18.6	17.6	18.1
House, 2 façades	25.6	19.0	26.6	25.1	21.8
Apartment, in a building with a lift	25.2	22.8	16.5	5.7	8.4
Apartment, no lift	14.0	19.6	9.5	12.3	8.2
Mean number of rooms in the dwelling	3.87	3.51	4.19	4.45	4.72
Total	10.3	2.3	21.9	3.4	62.2

Source: GGP survey, Belgium, 2009.

* By construction, as explained in the typology specification above.

Note: figures in parentheses refer to subsamples smaller than 30, and figures in italics point to a non-linear trend.

2.2 A focus on gender and generations

This section offers interesting figures on gender, age, and the living arrangements according to our typology on energy poverty/richness. These results are reported in Table 5.4.

The proportion of female respondents is higher for energy-poor households (60.3%), and even more so for the poor household granted with a last-resort aid (64.2%). These two subpopulations of households also have relatively younger respondents than the other groups. However, as both characteristics (gender and age) are those of the respondents to

the survey, it is more interesting to turn to the household as a whole and study the living arrangements.

Living arrangements significantly differ across the five subpopulations of our typology. In the Belgian GGP database (with its limits previously specified), more than two fifths of energy-poor households are made of one sole person whereas this proportion drops to one quarter among energy-richest households. Once again, this decreasing trend is broken by the poorest households who are granted a last resort aid (but are not in energy poverty according to our definition) for half of these households are one-person ones. It is important to underline that among the one-person households living in energy poverty, half are men, and half are women, whereas among the poorest households who are granted a last resort aid, there are more women living alone (29.1%) than men (20.3%).

Table 5.4. Gender, generation, and living arrangements according to the five types of households defined by our typology on access to affordable warmth (%)

	Types of households according to their access to affordable warmth				
	Energy Poor	Poorest (last-resort social aid granted)	Other self-perceived 'poor'	Energy vulnerable	Energy richest
% female	60.3	64.2	57.3	50.0	50.7
Mean age of household's respondent	46.1	47.7	49.2	50.1	48.8
Living arrangements and gender of the respondent (% in this type of households according to its access to affordable warmth)					
1 person (male)	21.4	20.3	16.6	14.3	12.9
1 person (female)	21.6	29.1	19.8	13.4	11.2
1 parent (male) family	(1.4)	(0.0)	(0.8)	(0.8)	(0.3)
1 parent (female) family	12.5	(13.3)	8.4	(2.9)	2.1
Couple (Respondent & partner)	13.6	(15.8)	20.3	33.6	31.2
2 Adults	(3.7)	(3.8)	4.5	(4.2)	3.3
Couple & 1+ dependent child(ren)	15.5	(9.5)	17.8	21.0	24.3
Other no dependent person	4.6	(3.2)	5.7	(5.0)	9.6
Other types with dependent person(s)	5.7	(5.1)	6.1	(4.6)	5.1
Total	10.3	2.3	21.9	3.4	62.2

Source: GGP survey, Belgium, 2009.

Note: figures in parentheses refer to subsamples smaller than 30, and figures in italics point to a non-linear trend.

The proportion of households made of one couple, with or without dependent child(ren), follow a nearly linear trend as the corresponding proportion increases from 29.1% for energy-poor households to 55.5% for the energy-richest households. This trend is no surprise as a couple may often mean two adult income earners. On the other hand, one-parent families represent nearly one household out of seven energy-poor households (13.9%) as compared to only one out of forty energy-richest households. The large majority (90%) of these lone-parent families are headed by a mother in energy-poor households. (This seems to hold true in the other subpopulations of households defined by our typology but the small numbers call for caution.)

Finally, 12% to 18% of all surveyed households are found in the three other types of living arrangements (two adults; other types of households with no dependent person; other types of households with at least one dependent person). There are few differences according to their access to affordable energy, thus to the five groups of our typology.

Differences by gender and age group of the respondent are now examined, for energy-poor households only (Table 5.5). For the respondents living alone, the likelihood of being in

energy poverty is similar for men and women if their age is less than sixty, and is higher for women after this age. In one-parent families, the dependent person(s) may also be a grandchild, or sibling(s); there are too few men heading such families in the sample, so no valid conclusion on differential rates by gender can be drawn for that comparison. For the women in one-parent family, the likelihood of being in energy poverty is highest if they are less than 40, and is far from being negligible after that age.

Table 5.5. Likelihood of being in energy poverty by gender and large age group (%)

	Age group		
	<40	40<60	60 and more
Men living alone	15.7	17.6	(9.5)
Women living alone	15.7	18.1	13.6
Women in one-parent family	35.0	21.3	14.3

Source: GGP survey, Belgium, 2009.

Note: figures in parentheses refer to subsamples smaller than 30.

2.3 Households' uncapabilities according to their access to affordable warm

Energy-poor households are deprived of most capabilities expressed by Nussbaum (2000: 78-80). The first one ("1. Life. Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living"), cannot be operationalised with the GGP survey. The next capabilities are proxied as shown in Table 5.6.

The second capability refers to **physical health** ("2. Bodily Health. Being able to have good health (...); to be adequately nourished; to have adequate shelter", Nussbaum, 2000: 78). In the literature on energy poverty, housing characteristics and health issues are often mentioned. There are large difference between types of households on health and on protein intake especially as one-third (34.8%) of the energy-poor households cannot afford protein every other day, as opposed to 1.6% for the energy-richest households. This is referred to as the heat-or-eat dilemma in the literature on energy poverty (Blow and Crossley, 2014). For one energy-poor household out of three, there might even be no dilemma, i.e. neither heat nor eat (protein) some days, for they declare having affordability problems for both heating and protein intake every other day. In addition, regarding dwelling characteristics (too small, too dark, too noisy) and environmental problems in the neighbourhood, energy-poor households and the poorest households are more often in unfavourable conditions. However, our variability index indicates that the differences between energy-poor households and the energy-richest ones are larger for physical health and nutrition than for housing characteristics (126.9% versus 77.9%).

Nussbaum's third capability refers to **bodily integrity** as well as **free and secure move**. Again, there are differences, especially for the feeling of security in the neighbourhood, an issue raised by nearly one quarter of the energy-poor households. The fourth capability reads as follows "**Senses, imagination and thoughts**. Being able to use the senses, to imagine, think, and reason – and to do these things in a "truly human" way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training (...). Being able to have pleasurable experiences (...)" (Nussbaum, 2000: 78-79). This capability thus refers to education, leisure, and culture in a general sense. Qualitative research (see chapter 6) shows that interviewed persons living in energy poverty dramatically limit their mobility for leisure (e.g. no financial possibility to go out for a drink or to the cinema) and "restrict their leisure to TV, and their hopes, to better days" (Lahaye et al., 2016: 97). Table 5.6 indeed exhibits large difference between the five categories defined by our typology and the variability index is indeed quite high (164.3%) here.

Nussbaum (2000: 79) calls the fifth capability “**Emotions**” and she relates it to attachment, love and care, as well as to a sufficient level of confidence and peace of mind to be able to manage one’s emotions. Table 5.6 shows that different accesses to affordable warmth are often (and always in a statistically significant way) associated with different prevalence of emotional problems. Indeed, about one fifth of the energy-poor households points at a lack of social support, frequent anxiety, and/or frequent feeling of depression, loneliness or sadness, while the corresponding proportions for the energy-richest households are around 5%. It is also worth noting that nearly half of the energy-poor households report that they cannot afford having friends or family for a drink or meal at least once a month. As operationalised by these variables, the emotion capability exhibits a variability index equal to 128.5%.

Table 5.6. Capabilities proxies for the five types of households according to their access to affordable warmth (%)

	Types of households according to access to affordable warmth				
	Energy Poor	Poorest (last-resort social aid granted)	Other self-perceived 'poor'	Energy vulnerable	Energy richest
Capability 2: Bodily Health: Being able to have good health (...); to be adequately nourished					
In a (very) bad health in general.	15.8%	(16.5%)	6.4%	(5.9%)	3.1%
Be limited in their ability to carry out normal everyday activities because of a physical or mental health problem or a disability	23.6%	40.4%	17.9%	17.3%	11.9%
Here are some things many people cannot afford even if they would like them. Can your household afford these, supposing you wanted them? Eating meat, chicken or fish or a vegetarian equivalent every second day	34.8%	(14.5%)	5.0%	83.1%	1.6%
Variability index			126.9%		
Capability 2: Bodily Health: To have adequate shelter					
Dwelling: too small	26.1%	(18.2%)	14.1%	(8.0%)	8.6%
Dwelling: too dark	16.3%	(15.7%)	12.1%	(12.2%)	7.9%
Dwelling: too noisy (street/ neighbours)	29.0%	26.4%	20.7%	17.7%	17.1%
Pollution or other environmental problems	25.1%	(14.6%)	12.5%	18.1%	8.8%
Variability index			77.9%		
Capability 3: Bodily Integrity. Being able to move freely from place to place; to be secure against violent assault					
Lack of public transport and would like to have a car or a van available for private use but cannot afford it	(2.4%)	(4.4%)	(0.9%)	(0.0%)	(0.1%)
Problems with crime, violence or vandalism in the neighbourhood	23.7%	(17.6%)	15.1%	16.9%	10.7%
Variability index			82.9%		
Capability 4: Senses, imagination, thoughts					
No diploma at all	5.7%	(6.9%)	3.3%	(1.3%)	1.1%
Would like to have a colour TV <u>but</u> cannot afford it	(2.4%)	(0.0%)	(0.5%)	(0.8%)	(0.0%)
Would like to have an internet connection <u>but</u> cannot afford it	15.4%	(15.8%)	7.4%	(4.2%)	1.4%
Lack of leisure spaces like parks or play-grounds <u>and</u> (lack of public transport or would like to have a car/van available for private use but cannot afford it)	(1.1%)	(3.8%)	(0.5%)	(0.0%)	(0.0%)
Lack of services and shops <u>and</u> (same:	(1.3%)	(3.1%)	(0.6%)	(0.0%)	(0.0%)

lack of mean of transport)

Variability index

164.3%

"/...

Capability 5: Emotions					
Dwelling too far from family	22.2%	25.3%	14.1%	16.5%	9.5%
To lack enough support if problem	19.3%	(12.7%)	12.1%	9.7%	5.3%
To have not a lot of people that I can count on completely	27.9%	27.0%	19.8%	18.7%	11.5%
Cannot afford having friends or family for a drink or meal at least once a month	49.3%	36.1%	14.5%	84.8%	1.9%
To have felt last week (rather often) frequent anxiety	19.7%	19.5%	9.1%	(5.1%)	4.1%
To have felt last week rather often or (almost) always depressed	20.5%	20.3%	8.7%	(5.5%)	3.6%
To have felt last week rather often or (almost) always lonely	19.0%	23.3%	11.8%	(3.8%)	3.6%
To have felt last week rather often or (almost) always sad	21.1%	21.4%	11.5%	(4.3%)	4.6%
To have felt last week rather often or (almost) always that one's life is a failure	14.4%	(10.8%)	5.3%	(4.2%)	2.2%
Variability index			128.5%		
Capability 6: Practical Reason					
How much control do you feel you will have over the following areas of your life in the next three years?					
Answer: Not at all or a little					
Your financial situation	43.7%	34.4%	22.5%	(9.0%)	8.7%
Your work	47.5%	49.3%	29.6%	22.7%	17.0%
Your housing conditions	33.8%	28.8%	13.8%	(8.5%)	6.0%
Your health	38.5%	37.8%	28.0%	17.7%	20.2%
Your family life	27.0%	20.6%	13.9%	(7.8%)	6.9%
Variability index			105.7%		
Capability 7A: Affiliation					
Did you experiment during the last weeks?					
Answer: yes					
A general sense of emptiness	24.1%	28.9%	16.4%	(8.1%)	7.3%
To often feel kept out	13.5%	(14.6%)	7.5%	(5.5%)	2.7%
Not enough people that I feel close to	14.3%	19.5%	8.8%	(7.2%)	5.8%
In the last 12 months, to have not spoken to anyone about one's private life or morale	37.7%	26.4%	42.8%	40.9%	37.5%
In the last 12 months, to have not listened to someone about one's private life or morale	39.4%	28.5%	39.7%	35.3%	34.4%
Variability index			38.0%		
Capability 9. Play. Being able to laugh, to play, to enjoy recreational activities					
Cannot afford going on a one-week holiday away from home at least once a year	69.5%	69.2%	40.3%	79.7%	6.9%
Cannot afford paying for a child an extracurricular activity of more than one day	51.2%	(30.6%)	16.5%	85.3%	3.3%
Variability index			168.8%		
Capability 10B. Control over one's material environment					
Wishes but doesn't own for financial reasons:					
TV, phone, car	25.8%	28.3%	9.6%	1.7%	1.7%
Washing machine, micro-wave	38.5%	39.6%	11.6%	4.6%	2.8%
PC and internet connexion	30.7%	30.2%	14.0%	5.1%	2.9%
Variability index			170.9%		

Source: GGP survey, Belgium, 2009.

Note: figures in parentheses refer to numbers lesser than 30 and figures in italics point to a non-linear trend.

The sixth capability refers to “Practical Reason. Being able to form a conception of the good and to engage in critical reflection about the **planning of one’s life**.” The first part cannot be operationalised with the GGP survey. The second can and refers to what psychologists call an internal locus of control, or the belief that one’s life can be controlled by oneself. Again, the proportions of negative answers follow a declining trend with the highest ones for the energy-poor households, especially regarding their work and financial situation, and the lowest proportions for the energy-richest households, though one fifth among the latter feel no or little control on their health, which can be compared to nearly the double proportion among the former.

The seventh capability is about **affiliation and social interactions**, and it exhibits the smallest variability (38%) across the five categories, although the linear decreasing trend is generally perceptible here too. Social sharing is especially low across all five categories: about 40% of all respondents did not have a personal conversation during the last 12 months, but poorest households granted with a last-resort social aid show lower proportions (about 27%), maybe due to their contact(s) with a social worker.

Neither the second part of the affiliation capability (protections against discrimination) nor the 8th capability related to concern for and relation to other species and **nature** can be studied with the GGP survey. Table 5.6 clearly shows that distributive justice policies cannot equalise energy consumption between all types of households – it would increase climate change.

The penultimate capability is entitled “**Play**” and refers to the capability to enjoy recreational activities. A one week holiday once a year and an extracurricular activity of more than one day for a child appear to be unaffordable for more than two thirds and half (respectively) of the energy-poor households whereas they are seldom an issue for the energy-richest households. Our variability index between these two categories of households is thus very high: 168.8%

Finally, the tenth capability refers to the control one may have over one’s environment. Part A of this capability is on freedom and protection for political participation, and cannot be tested here. Part B is related to the **control over one’s material environment** and the ability “to hold property” (Nussbaum, 2000: 80). It is a problem for about 30% of the energy-poor households, but for 2 or 3% of the energy-richest households, showing a large variability index of 170.9%.

To sum up, energy-poor households differ the most from the energy-richest households for the capability related to material property and interestingly enough, for the capabilities related to recreational activities (“Play”) and to culture (“Senses, imagination and thoughts”). Culture though enables to develop another social imaginary, in Castoriadis (1987)’ terms that could be more just and less energy demanding, thus more in line with low-carbon energy systems. Households living in energy poverty are also very unequal relative to the energy-richest households in their capabilities related to emotions management and to health and protein intake.

2.4 Are energy-poor households different from the poorest aided households?

In terms of capability deprivation, are energy-poor households different from poor households receiving a last-resort social aid? According to our definition, the latter are not energy poor, but their perception of being poor reported in the survey has been somewhat ‘objectivised’ by a public body. As shown by Table 5.7, several statistically significant differences between these two categories of households show that elderly-poor households are even more often deprived than the poorest households granted with a last-resort social aid.

The deprivation of the former appears to be mainly caused by a lack of material resources and economic power, and this limits several capabilities: bodily health – both general and

nutrition, and adequate shelter; senses, imagination and thoughts; emotions; practical reason or locus of control over one's financial situation in the next three years; and play.

On the other hand, the poorest households granted with a last-resort social aid are in an even worse situation than households in energy poverty for health and disabilities, and mobility (both for a lack of public transportation means and an affordability problem to have a personal car). Capabilities' deprivation is real with various forms for both categories of households under study. These analyses are a supplementary good test of our typology and shows that energy poverty is a specific issue in Belgium and not a subtype of general poverty, given these social welfare instruments.

Table 5.7. Significant differences between energy-poor households and households receiving a last-resort aid (Bonferroni pairwise comparison test significant at $p < 0.05$)

Capability	Capability proxies	2 types of households according to their access to affordable warmth	
		Energy Poor	Poorest (last-resort social aid granted)
<u>Energy-poor households are more deprived</u> than the poorest households granted with a last-resort social aid			
2. Bodily health: general and nutrition	Cannot afford eating meat, chicken or fish or a vegetarian equivalent every second day	34.8%	(14.5%)
2. Bodily health: adequate shelter	Dwelling: too small Pollution or other environmental problems	26.1% 25.1%	(18.2%) (14.6%)
4. Senses, imagination and thoughts	Would like to have a colour TV <u>but</u> cannot afford it	(2.4%)	(0.0%)
5. Emotions	Cannot afford having friends or family for a drink or meal at least once a month	48.7%	36.1%
6. Practical reason (locus of control)	No or little control in the next 3 years over one's financial situation	43.7%	34.4%
9. Play	Cannot afford paying for a child an extracurricular activity of more than one day	51.2%	(30.6%)
<u>Energy-poor households are less deprived</u> than the poorest households granted with a last-resort social aid			
2. Bodily health	Be limited in their ability to carry out normal everyday activities because of a physical or mental health problem or a disability	23.6%	40.4%
3. Bodily integrity: free and safe move	Lack of public transport <u>and</u> would like to have a car or a van available for private use but cannot afford it	(2.4%)	(4.4%)
4. Senses, imagination and thoughts	Lack of leisure spaces like parks or play-grounds <u>and</u> (lack of public transport or would like to have a car/van available for private use but cannot afford it)	(1.1%)	(3.8%)
	Lack of services and shops and (same: lack of mean of transport)	(1.3%)	(3.1%)

Source: GGP survey, Belgium, 2009.

Note: figures in parentheses refer to numbers lesser than 30.

3. CONCLUSION

In this Chapter, the relational approach is expressed in our typology using self-perceived income, as well as in our comparison between energy-poor households and other less-poor social groups. This comparison clearly shows a deprivation of capabilities associated with energy poverty in Belgium in more areas of daily life than expected: not only regarding housing, health, and mobility, but also regarding access to culture and recreational activities, as well as the feeling of fulfilment and ontological security. For these households living in energy poverty, access to culture is mainly reduced to TV shows and advertisements for consuming ever more. These also enhance social comparison and therefore reinforce perceptions of social exclusion and of social stigma. The relational approach allows acknowledgment that energy poverty and deprivation of capabilities are also relative to the situation of other social groups, and therefore, to increasing social inequalities (Bauman,

2013). Therefore, long-term objectives for fighting both social disintegration and climate change should be democratically imagined and politically supported.

6. LIVING IN ENERGY POVERTY: A QUALITATIVE APPROACH

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This Chapter gives voice to people living in energy poverty. By listening to many of these persons or families in a careful and empathic manner, our qualitative study is the first in Belgium to show what it daily means to live in and cope with energy poverty in Belgium. Therefore, this Chapter is one of the main parts of this report.

1. METHODOLOGY

1.1 Search for interviewees and selection process

The universities worked together to cover the three Belgian Regions: the University of Louvain la-Neuve studied the Brussels-Capital Region, the University of Mons concentrated on La Louvière and Mons-Borinage in the Walloon Region and the University of Antwerp focused on the province of Antwerp in the Flemish Region. In their search for interviewees, the researchers contacted a variety of organisations and networks. Each Region had its own peculiarities and characteristics, but the overall procedure was the same. Most of the interviewees were recruited by a Public Centre for Social Welfare/Action¹⁶, especially in Flanders. Some centres have an energy tutor or an energy unit that served as an important source. Others contacted their users in debt mediation. As we wanted to select not only those already making use of social services but also those who might have been eligible but did not use them, other channels of recruitment were used: social housing companies, non-profit organisations of various types, and personal contacts.

With on-site visits (see also Chapter 7) or by telephone calls, we contacted these intermediaries. This could be a generalist social worker, a specialized social worker of an Energy Unit, the head of the Energy Unit or the head of the Public Centre for Social Welfare/Action or the private organization. We explained the goal of our research, our search for interviewees, the criteria they had to meet, the aim and procedure of the interviews and we asked them for their cooperation. By acting this way, we made the selection of candidates dependent on the judgement of the social worker or intermediary to decide whether someone lives in energy poverty or not. To help them to make a choice, we gave them the following criteria: people with specific problems concerning energy, like people with a prepayment meter; people with high energy debts, or, on the contrary, people who have very limited energy consumption because they restrict themselves; people with a long-lasting discussion with an energy supplier and people in bad housing conditions (private or social tenants, owners) who either experience or have experienced problems to heat the dwelling or have dampness or insulation problems.

The reasons why some Public Centres for Social Welfare preferred not to cooperate were, for example: violation of the privacy of their clients, lack of time and/or interest, or because they simply had not found any candidates willing to participate. Associations serving people living in poverty, such as housing offices or social grocery stores, argued that they do not know enough about the backgrounds of their clients to decide who lives in energy poverty and who does not. In Flanders, it was remarkable that smaller Public Centres for Social Welfare delivered more addresses than large ones. The reason for this might be that these smaller organizations almost immediately knew whom they had to ask to cooperate (two or three persons), whereas the larger ones had the 'embarras du choix' so they did not know where to start.

¹⁶ In each municipality, there is a publicly funded centre for helping people in need, mostly from a financial point of view. Literally translated these centres are called in Dutch, "Public centres for social welfare" and in French "Public centres for social action". In English, here, we use both expressions.

We did not aim for the sixty interviews to be statistically representative, but wanted to cover a wide spectrum of groups in society: male-female, young-old, tenant-owner, single-couple, with or without children, living in a city or village, working or inactive. Both in Flanders and Wallonia, homeowners and working people were hard to find. These demographic characteristics are common in social research but there were also specific reasons to this research project to search a variety of situations when constituting the sample of Interviewees. Indeed, one objective of this project was to study differences between gender and generations in their experience while being in energy poverty, as already mentioned in Chapter 2. Previous research also shows that older, single persons (especially elderly women) have a higher risk of being energy poor. Tenure status and household type also play an important role, as well as (paid) employment, with tenants, single parents, singles and households with no income from work having a higher energy poverty risk (Delbeke & Meyer, 2015). Poverty research in general has found that the risk of poverty is unequal depending on location, with a higher incidence of poverty in large cities, but also in rural areas (see Chapter 5). Marissal et al. (2013) have found similar results for energy poverty.

1.2 Interview method

1.2.1 Interview guide

The interview guide was common to the three universities working on this research. This half-open guide addresses six broad topics: housing description and location, housing occupants, comfort, budget management, social life and health. We changed the order of the questions depending on the course of the interview or asked more detailed information on certain subjects, when we felt this would result in richer data. As such, we followed the method of Kaufmann (2011), whose characteristics are empathy with the interviewee, very open-ended questions, and numerous follow-up questions. These in-depth interviews are closer to a conversation between people that are familiar to each other than to a semi-directive interview; they are quite similar to ethnographic interviews (Spradley, 1979).

1.2.2 Interview process

The researchers conducted the interviews between February 2014 and the beginning of 2017. Most of the interviewees agreed to have the conversation in their own home, which made it possible to observe the state of their housing and its quality. Some were keen to show the dwelling, others were more reluctant. In Wallonia the researchers asked whether they could take pictures, but with no success. Only a handful respondents chose a neutral place (like the office of a social service provider) for the interviews, rather than their home.

Interviews lasted approximately one hour and were recorded using a digital recording appliance (recorder or laptop). They were transcribed literally. The interviews were in Dutch or French, but for this report, all citations were translated into English, which can have a small impact on interpretation (e.g. certain nuances disappear).

1.2.3 Data analysis

We analysed the interviews using NVIVO 11. The three research groups created a common codebook with different categories of themes, using continual feedback among the three universities to improve this codebook. Four major categories were identified based on the interviews: factors causing or aggravating energy poverty, everyday practices, other coping practices, and other fragilities associated with energy poverty. The corresponding results are presented in Sections 2, 3, 4 and 5 below. Some quotes are given with the question of the interviewer, who is noted as “I”.

1.3 Sample description

In total, 60 interviews were realised, 20 in each Region. Table 6.1 shows the demographic characteristics of the interviewees. The sample description refers to the person that mainly

answered the interview questions. When couples took part in the interviews together, we only consider demographics (e.g. age, activity status) of the main contact person.

Most interviewees have weak socio-economic characteristics. Only 10 of them are currently working, with 21 interviewees unemployed, 4 on sickness leave, 9 on a retirement pension and 11 on disability benefits. Three interviewees are immigrants with a temporary working permit or migrated illegally so therefore, no information on their working status is provided. These weaker socio-economic profiles are reflected in the tenure status. Only 16 interviewees out of 60 are owners of their house, nearly half of them in Brussels. The rest are tenants, of whom 24 rent a social housing unit and 20 rent on the private rental market.

We changed all the first names of the interviewees to guarantee their anonymity.

Table 6.1. Socio-demographic characteristics of the 60 interviewees

Respondent	Sex	Age group	Household type	Activity Status	Tenancy status	Region
Adrijana	F	25-49	Single parent		Tenant, private	FLA
Albert	M	65+	Couple	Pension	Owner	WAL
Alice	F	30-39	Single with children	Working	Tenant, social	BC
André	M	50-64	Single parent	Unemployed	Tenant, social	FLA
Anna	F	35-49	Single	Unemployed	Tenant, private	WAL
Anna-Maria and Diego	F/M	25-49	Couple with children	Working	Tenant, private	FLA
Annie	F	60-69	Single	Working	Tenant, social	BC
Antoine	M	25-34	Shared house with 10 people	Unemployed	Tenant, private	BC
Brigitte	F	25-49	Single parent	Disability	Tenant, social	FLA
Brigitte	F	35-49	Single parent	Unemployed	Tenant, social	WAL
Bruno	M	40-49	Single	Working	Tenant, social	BC
Carine	F	50-64	Single	Disability	Tenant, social	FLA
Carine	F	50-65	Couple	Only man works	Tenant, social	WAL
Catherine	F	35-49	Single parent	Unemployed	Tenant, social	WAL
Chantal	F	35-49	Couple with children	Only man works	Tenant, social	WAL
Christine	F	50-65	Single	Unemployed	Tenant, social	WAL
Christophe	M	35-49	Single	Disability	Tenant, private	WAL
Cindy	F	25-49	Single parent	Disability	Tenant, private	FLA
Clarisse	F	50-65	Single parent	Unemployed	Tenant, social	WAL
Conny and Wim	F	50-64	Couple with children	Working	Tenant, private	FLA
Guy	M	65+	Couple	Disability	Tenant, private	WAL
Iman	M	50-59	Couple with a child	Disability	Tenant, social	BC
Irma	F	40-49	Single with a child	Unemployed	Tenant, social	BC
Jasmine	F	40-49	Couple with children	Unemployed	Tenant, social	BC
Jeanne	F	60-69	Single	Pension (+ a side job)	Owner	BC
Jocelyne	F	50-65	Single	Unemployed	Owner	WAL
José	M	35-49	Single	Sickness	Owner	WAL
Jozef	M	65+	Single	Pension	Tenant, social	FLA
Julie	F	25-49	Single parent	Disability	Tenant, private	FLA
Kristof	M	50-59	Single	Unemployed	Tenant, social	BC
Lucie	F	60-69	Single with adult child and grandchild	Unemployed	Owner	BC

Madeleine	F	65+	Single	Pension	Tenant, social	WAL
Malwena	F	35-49	Single parent	Unemployed	Owner	WAL
Maria	F	65+	Single	Pension	Tenant, private	WAL
Maria and Louis	F	50-64	Couple, one 65+	Disability	Tenant, social	FLA
Marie-Rose	F	65+	Single parent	Pension	Tenant, social	WAL
Mariette	F	65+	Single	Pension	Owner	WAL
Martine	F	50-64	Single parent	Working	Tenant, private	FLA
Martine	F	35-49	Single parent	Part-time worker	Owner	WAL
Meryem/Saïd	F/M	30-39	Couple with children	Unemployed	Tenant, private	BC
Micheline	F	60-69	Single	Unemployed	Tenant, social	BC
Mireille	F	40-49	Single with adult children	Working	Owner	BC
Mutumbo	M	35-49	Single parent	Unemployed	Tenant, social	WAL
Nadia	F	40-49	Couple with children	Working	Owner	BC
Naima and Youssef	F/M	25-49	Couple with children	Unemployed	Owner	FLA
Nur	F	50-59	Single	Unemployed	Owner	BC
Olga	F	50-64	Single parent		Tenant, private	FLA
Ousmane	M	40-49	Single with children	Unemployed	Tenant, private	BC
Patricia	F	50-59	Single	Sickness	Owner	BC
Patrick	M	50-64	Single	Disability	Tenant, social	FLA
Paul	M	50-64	Single	Unemployed	Tenant, private	FLA
Renate	F	50-64	Single parent	Sickness	Tenant, private	FLA
Robert	M	50-65	Single	Sickness	Tenant, private	WAL
Rose	F	50-59	Couple with children	Working	Owner	BC
Sandra	F	50-64	Single	Disability	Tenant, private	FLA
Serge	M	60-69	Couple	Pension	Tenant, social	BC
Sonia	F	50-64	Single parent	Unemployed	Owner	FLA
Stefan and Katrien	M/F	50-64	Couple with children	Disability	Tenant, private	FLA
Vera	F	25-49	Single parent		Tenant, private	FLA
Yacine	M	60-69	Couple with children	Pension	Owner	BC

Before we continue with the findings, we want to remark that this research has some room for improvement. For example, in Flanders, the fact that many of our interviewees have other difficulties may be a result of our selection procedure (mainly via Public Centres for Social Welfare). It would be interesting to repeat this research with people who are not known within these organisations but it is very difficult and time-consuming to locate them, as was done in the Brussels-Capital Region (see Chapter 7). We did not succeed in recruiting many interviewees aged 65 years or older. The interviewees could be prudent in what they reveal to the interviewers: perhaps they do not tell the whole story, or they present their situation in a rosier way if they feel ashamed. Telling a story also always takes place within their own perspective, which is influenced by their background and social and cultural norms. However, we think we provide a rich picture of what the daily lives of people living in energy poverty looks like. This picture complements the preceding quantitative Chapter 5 dealing with the same topics.

2. FACTORS CAUSING OR AGGRAVATING ENERGY POVERTY

This section is divided in three different parts, clustering all the different factors that might cause or aggravate the situations of energy poverty lived by the interviewees.

2.1. Material and technical factors

This section focuses on the material and technical aspects of the dwellings (the structure and the age of the building, the lack of heating, poor ventilation ...) that cause or aggravate the situation of energy poverty.

The interviewees are mostly part of the low(est) socio-economic classes. As the waiting lists for social housing are long in the three Regions (several years, and ten years in the Brussels Region), they often have to rely on the private market to rent a dwelling, and this often compels them to accept low-quality housing. When they succeed in accumulating some capital, they can afford a low-quality house ("emergency buyers"), but then often lack the financial means for the necessary renovation budget.

Patrick from the Flemish Region has insulation problems in his dwelling:

"And I have a shack that I can't get warm in the winter and that is too hot in the summer (...). Normally you should have insulation. You have 2 centimetres plasterboard and there should be insulation behind it. But here you have plasterboard and there is nothing behind it!" (Patrick, Flemish Region).

Lack of insulation is often designated as one of the primary responsible for the heating problems:

"Because it's badly insulated, we can heat all we want, it's never really warm. (...) And in the bathroom, we're obliged to put an electric heating. (Short pause) Because otherwise, we've to turn the gas heating for three hours (insists) for the room to be a little bit (insists) warm" (Alice, Brussels Region).

Another technical problem often mentioned is the old age of some appliances. For example, Albert does not have the money to replace obsolete appliances.

"We are consuming too much electricity. The electricity system is too old, it is well 25 years old. It would be better to replace it. Our boiler is also old, it is 35 (...). The new boilers do not last more than 10 or 15 years maximum. Our old boiler worked for 35 years, it's something else" (Albert, Walloon Region).

Dampness is a very tough problem to face for those who do not have the money to do the necessary renovations.

- *"We made a room downstairs (...), now there is dampness.*
- *The daughter-in-law: Some dampness also comes from upstairs (insists). (...)*
- *I: Isn't there a risk that the moisture might go up in the other rooms if one does nothing?*
- *Maybe."* (Nur, Brussels Region).

In many cases, multiple defects come together:

"One gas stove to heat the whole house, the bathroom was outside. That was an improvised veranda. She [the homeowner] called it a veranda, but it was just four beams with a corrugated plate and that was it. And it was not at all insulated. I could not use my washing machine and tumble dryer during winter, they would freeze. Sometimes there would be ice in the toilet." (Cindy, Flemish Region).

Among all material factors causing or aggravating energy poverty, one is of great importance in Flanders and in Wallonia: the prepayment meter. This system does not exist in the Brussels Region. With a prepayment meter, consumers can still use electricity or gas, with a card that they need to reload with money. The system was set up to prevent a total energy cut (see more on prepayment meters below, in sections 2.3.2 and 3.2). A related technical problem mentioned with respect to these prepayment meters is the difficulty that the users have to find a recharge point for the card and the problems of mobility that this poses to them.

- *I: "You do not have a prepayment meter?"*
- *No, I do not want to. To get the cards, where will I go? Already, for a roll of garbage bags, if you knew where I have to go! We have a bus stop here on the road but there are no more neighbourhood shops"* (Jocelyne, Walloon Region).

2.2 Macro-economic factors: cost and provision of energy

The cost and provision of energy are often indicated by our interviewees as problematic. Several interviewees end up in energy poverty due to rising energy costs, either because of poor housing quality, and/or because they spend all or most of the day at home (because they are unemployed, or retired, or on sickness leave, or have a disability).

“Energy is about one fifth of my expenses per month. I base myself on that because gas, electricity, you have to count the winter months, is 200 €. Since I have an income of more or less 1000 €, it is indeed a fifth of my income. So, it is not obvious (...) We pay attention but despite everything, energy is expensive, it is very very expensive.” (Marie-Rose, Walloon Region).

“But if you’re at home all day, you leave it [the heating] on 20. Whereas [if] you work all day, you consume much less.” (Sandra, Flemish Region).

- I: *“For you, what is the most difficult thing? (...)”*

- *It is the energy that costs more huh... the electricity, the gas (...), the water... It goes up every year”* (Kristof, Brussels Region).

Others, like Bruno, also mention the ever-rising cost of living in general as a difficulty in their lives.

“We’ve to consider that at that time, at the time of the Belgian francs, the apartments were costing only 200 €! They didn’t cost 600, 700 € like today! At that time, we were earning 1500 € but we lived like kings! We had a rent of 200 €, gas and electricity, it was 50 € per month! It wasn’t 200, 300 € like today. So that’s a huge difference.” (Bruno, Brussels Region).

Some of our interviewees complain about the rising cost of energy due to taxes.

“The only thing she [the Minister for Energy] pushes for, is energy efficiency. But how do you help people that have problems with it now? They abolish the free kilowatt-hour tariff, the ‘Turteltax’ enters... is that helping people eh?” (Brigitte, Flemish Region).

“My electricity bill was 146 € and from January... They said it is [name of the specific fixed energy contract] so we would pay the same amount for three years. We’re not even two years out, and now we already have to pay 199 €.” (Maria, Flemish Region; this interview was done in a period when the government decided to raise VAT on electricity and to offset the cost of green energy).

2.3 Social trajectories

We have seen above how several material and technical factors are often intricately intertwined: poor households often have no other choice to stay in or to move to old dwellings that are poorly insulated. Utilising the concept of social trajectories, a systemic approach is put forward by considering economic factors and life accidents that are also often part of the trajectories of the interviewed energy-poor persons.

2.3.1 Income and debt

Difficulties in making ends meet, the shortage of employment and the high cost of living were often mentioned by our respondents in relation to their situation of energy poverty.

“I’m looking for a job but I cannot find one. You cannot find something that does not exist. We have to find something, but everybody knows very well that there are not [enough job opportunities].” (Malwena, Walloon Region).

“I’m now completely without money. Those coins that fling about over there, that’s all there’s left. Two or three €, that’s just enough for one bread.” (Sonia, Flemish Region; this conversation took place on the 23rd day of the month).

When the budget is tight, the options are limited. For our interviewees the choices were typically between relying on social security benefit or on the informal economy.

- I: *"You really programme everything...*
- *Yes, sometimes I do not sleep at night when I know I will not make ends meet. Because to say that the fifth of the month is already the end of the month. So I'm constantly calculating, paying attention."* (Anna, Walloon Region).

"On the other hand, well, I have to pay my rent, the gas, the electricity, the medical bills are important too, there are the school costs of the kids, ... I have children who already are adults..., you've to eat, you've..., plus, I smoke, so it's a well-calculated budget and... but we can't say that we're starving" (Annie, Brussels Region)

"I raised my son alone and at the time I really had some shit um... financially. And I think at some point I had made some requests for deferred payment. (...) When I got the annual bill, I wasn't able to pay it at once. That, I remember that." (Jeanne, Brussels Region)

For some interviewees, it is not fixed monthly costs that are problematic, but rather non-recurring costs, which destabilise their fragile household budgets:

"Now it's the final invoice for electricity, that's also 100 € extra this month... The health fund: 150 € extra. It is those things that always... The moments that... Next month it's the fire insurance and when all these surpluses come on top of it, it gets difficult. (...) The car taxation came, that was around 300 €, I mean, those things, those surpluses and payments and stuff, this is actually what makes it so that you can make ends meet, but you don't have anything. So, if I would be very ill tomorrow, I mean, I would get into trouble." (Maria, Walloon Region).

For her part, Jeanne decided to do some undeclared work to supplement her pension.

- I: *"And when you say you have a small job to make the end of the month easier, is it only for the hobbies, to be more comfortable, or without it, it would be hard?"*
- *No, it would be hard. I mean, if I never leave home, doing nothing, then it would be ok"* (Jeanne, Brussels Region).

Concerning energy bills, we see that most of our interviewees have debts or have just finished repayments, either for electricity or for gas, or for both. But the continuous threat of running into debts is not only related to energy bills specifically but an almost generalised aspect of the living conditions of those living in poverty. Some interviewees, for example, run into debt due to arrears in the payment of rent (e.g. Vera is in arrears of three months' rent). Hence, even regardless of arrears in energy bills, a significant part of our interviewees are in debt mediation or in a collective debt arrangement. This can make life very difficult as the household budget is fully or partially controlled by social workers and people are not entirely free to make and choose their own expenses (see further). Debts also have a snowball effect: a (small) initial debt can quickly run out of control and take on staggering proportions, especially in the case of energy consumption debts. This is further aggravated by the common practice of energy suppliers to sell debts to an external debt collecting company, which further increases the costs for vulnerable customers.

"I receive more or less 1200 € but I have 3 or 4 bailiffs who take away a big part, so I have nothing more. I have a rent of 290 €, plus 50 € to pay my debt. Sometimes there are bills that I do not pay because I could not even afford it and I prefer to have money to eat for my son, to pay my rent and have a roof over my head." (Brigitte, Walloon Region).

"We only have one unemployment allowance for... hum six people, we don't have... much, you see, we have difficult situations to deal with. In addition, we're now in debt mediation. Our... our incomes, it's the judge who decides, you see, he pays for everything and then he gives us the rest." (Meryem, Brussels Region).

2.3.2 Additional financial difficulties: it is expensive to live in energy poverty

Already in the title of his book, Hirsch (2014) highlights that "It becomes expensive to be poor" (as translated from French) and he further demonstrates his statement. This is also one of our findings related to energy poverty in Belgium: living in energy poverty is expensive as it entails more expenditures.

High-energy costs sometimes result from the use of old and inefficient electrical appliances. For example, Sonia lacked money to buy the most economical condensing boiler, and her choice of a much cheaper model led to premature break down. Some interviewees consulted 'energy savers', who replaced some light bulbs or gave the household a new showerhead, but these households do not have the means to replace all light bulbs in their entire house. Electrical equipment is sometimes bought in second hand stores or acquired as donation.

"Most of them [electrical appliances] are energy consuming since they're quite old. I got rid of my tumble dryer, it was using too much energy, I could not afford it anymore when I got the prepayment meter. (...) the problem is, if that [washing machine] dies, I have to replace it by something I get for free or that I buy in a recycling shop, since I have no budget left at all (...) And then it's no longer energy-saving eh." (Sonia, Flemish Region).

Additional costs can also occur, for example for an omission of reference on the invoice of energy suppliers:

"Because I forgot to put the reference, 50 €! I had received an invoice from my daughter but it is true that my surname and that of my daughter are the same. I forgot to put the communication, I got 50 € fine!" (Clarisse, Walloon Region).

Lucie feels she had to deal with a scam to resolve a pipes' problems in her house:

"it was flowing here in my living room, because just above, my bathtub..., there were some pipes that were leaking – because they were placed 40 years ago – and every person that I asked to come, they were asking 60 €, just to look huh. But when you don't have..., it's a lot 60 € huh! (...) one of them told me "It's the boiler", the other one told me "It's the pipes", and this and that, and finally they were asking outrageous prices, the cheapest asked 1500 €... but some of them even asked so much as 25 000 € for some nozzles, I tell you that, it's a scam...!" (Lucie, Brussels Region).

We can assume that sometimes, there is too high a trust in professionals that "know what they are doing", which can lead to excessive costs for bad work. Plus, the high demand for renovation work creates plenty of room for unscrupulous contractors promising low costs or to the contrary overcharging their clients to finally deceive them, especially for the most vulnerable.

Prepayment meters can exacerbate difficulties linked to the household budget, as the availability of electricity and gas depends on the incomes of the consumer. When consumers are out of money and the emergency credit is fully consumed, they use (much) less than they need.

"Yes, you have to pay much attention. (...) Especially when you don't have money to recharge, it's very hard. I don't have gas, no electricity, nothing... You always need to set aside money for your prepayment meter card. But if you don't have that, like in my situation, it's very difficult." (Adrijana, Flemish Region).

In addition, interviewees from both the Flemish and the Walloon Regions complain about the higher cost of energy when using prepayment meters:

"They want to help people that can't pay their bills with it. You receive an offer to go and get such a card, but in fact, it is the most expensive supplier you can get. That's right, isn't it? So what's the use of offering people who can't pay their bills...'Come, take this card'...And it's actually a mere necessity, you have no choice but to take it. Otherwise, you fall completely without electricity. But you have to charge for hundreds of euros each week eh! So that it's more expensive than when you were still paying your bills." (Martine, Flemish Region).

2.3.3 Fraud or malpractice

In addition to these material and financial problems, several interviewees have to deal with fraud or are treated unfairly by their landlord. Conny, for example, lives in a dwelling that was once said to be 'uninhabitable' by an energy expert. In Martine's apartment, the landlord committed fraud since the electricity of the shared garage was tapped from her meter box. This problem was solved after a long period; Martine now has her own meter. However, she

no longer has access to the main circuit breaker in the garage: the owner has replaced the door that gave Martine access to the garage with a brick wall. As a consequence, Martine is now dependent on neighbours when her electricity is interrupted:

“When the fuse has blown, and this happens two, three times a week, I have to search for neighbours that have a car in the garage, so they can open the gate. If that doesn’t work out, I have to call the landlord, and she sends someone over from [a village nearby].” (Martine, Flemish Region).

Anna also had a problem with her meter, forcing her to pay for the consumption of the whole building, but could not move out for a while because of a fraudulent rent contract.

“After that, I rented a studio where, unfortunately, I was not informed that I had a gas meter but I did not know that the other apartments were connected on my meter. So, it was the first one to light that was served but it was me who paid (...) I stayed 3 years because the owner falsified the lease, squarely (...) Here I still had the bad surprise that the electricity of the commons was transplanted on my meter.” (Anna, Walloon Region).

As a last example, Serge was accused of tampering with his energy meter located in the landlord’s basement. As Serge had no access to the basement, he only noticed the fraud when he got a 3000 € bill.

“I had a 3000 € bill to pay (...). First, I went to [the supplier] to say, well, I don’t agree with this, I never tampered with the energy meter, I even don’t know how to do it. First of all, I don’t have access to the basement, second, I don’t have my right hand left [due to a car accident].” (Serge, Brussels Region)

Not only owners can commit fraud or mistreat tenants. In some cases, energy suppliers also make use of unfair strategies or make administrative mistakes. For example, some energy suppliers sell contracts at people’s doors. Often, people are not fully aware of the consequences of signing contracts or are misled, and they end up with expensive energy tariffs. Anna-Maria shows how the complex energy landscape prevents people of acting with full consent:

“I switched to [energy supplier Y], but in November/December, I was searching the internet to compare suppliers, and I saw [supplier Z]. For [Z], you have to fill in an online form in order to know your monthly rate. Suddenly, I got a bill of 180 € and I didn’t understand why, I didn’t have a contract with [Z]? They said I had sealed a contract online. I said: ‘No, I was just looking, I did not sign anything. I did not click a button to change from [supplier X] tot [Z].’ (...) They never sent me any contract that I had to return with my signature, so they don’t have my signature. So I said that I didn’t have an agreement with them. That’s not possible, right?” (Anna-Maria, Flemish Region)

Guy’s companion was confronted with the same kind of fraud. Despite the fact that Guy knew what to do to cancel the unintended contract, his situation was not resolved at the time of the interview.

“Fifteen days are passing and I receive from the company a confirmation of the contract. I am rewriting a registered letter stating that I have already sent a registered letter and that I am relinquishing this contract because in the contract agreement it was marked that there were fourteen days to retract, what we did. Since then, we receive invoice on invoice, invoice fees, warnings, we receive everything (...) Now, I wait and I will not pay anything” (Guy, Walloon Region).

Meryem and Saïd are particularly unfortunate, because, additionally to their problems with their energy company that cut them off, although, according to them, they did pay their bills, their neighbour plugged themselves in on their energy meter. Because they de-plugged their neighbour from their meter, they came at their door to intimidate them.

“The guy, he has the nerve to come and see my wife and to tell her “Don’t plug appliances that consume too much energy”. The guy is stealing our electricity huh. (...) He did some threatening and stuff. (...) He intimidated her” (Saïd, Brussels Region)

Some cases of dishonesty were also reported on the behalf of contractors, as for Marie-Rose. She uses the expressions "it was so badly done" and "the bricks that are broken anyway" to explain the source of her thermal discomfort.

"I do not know when they did work in the houses here, they replaced all the windows, all the doors, everything, but it was so badly done that they did not finish and we have no insulation. The door jamb is not insulated, nothing at all. When you remove the wood, you see the bricks that are broken no matter how." (Marie-Rose, Walloon Region).

2.3.4 Life accidents

For at least a dozen interviewees, tensions in intimate relationships, divorces and even domestic violence sometimes cause many other problems, including finding oneself in a bad housing situation and in energy poverty, or in a bad housing situation made worse by energy poverty.

"I had no other choice since I didn't want to take the house away from the children. But if I've had another option, I would've never rented this. Because I knew the shortcomings this house had. But they were not that bad at that time, as now, two years later." (Julie, Flemish Region).

Some of our interviewees are being burdened with debts that their ex made in the past, or they have fought for long in costly court procedures.

"I have a considerable heavy and painful history. It all started with a divorce, a nasty divorce in fact. It went so bad, that I got a confinement and I've been homeless for several times." (Paul, Flemish Region).

"Since my husband left me, I have financial problems and then my mom also helped me a little bit but she died" (Jocelyne, Walloon Region).

"Since... five years now. I was self-employed, but with the economic crisis, I lost everything. Not having any job..., my family left too, and because a misfortune never comes alone, I had a cancer at the same time and... That's it" (Kristof, Brussels Region)

A divorce can also have an impact on homeowners. Sonia for example, bought a house while she was married, and she and her partner planned to renovate it. A few renovations have been realised, but before the renovation project was finished, they separated. Sonia does not have enough money to pay for the work by herself and as single woman with a low budget, it is not possible for her to get a loan from the bank. Renate could no longer afford to live in her house (as owner) after her divorce:

"Well, you know...the first years you can... you offset it eh, but at one time there are financial... Deeper problems start eh. You get fired, since you can't get it out of your mind, you get fired, you are evicted, because, when having arrears on your mortgage for a year and a half, the banks says: 'you have to appear in court eh'." (Renate, Flemish Region).

It is sometimes a bit too far of a stretch to say that these events are directly causing energy poverty, but they are definitely contributing to it, particularly for people having it hard to keep a financial balance. A life accident sometimes causes depression that can lead to neglecting to pay a bill or to underestimating an insulation problem or a construction default. For most of the participants, lack of money was the main cause of energy deprivation. And a life accident often was at the origin of that financial situation (bankruptcy, cancer, divorce...). This is the reason why we address those events here.

2.3.5 Poor knowledge, non-take-up of rights and difficulties with administrations

Having poor knowledge of energy-related subjects, non-take-up of rights, and having difficulties with administrative issues may hinder persons in energy poverty from improving their situation. Indeed, it is experienced as quite confusing to understand the procedures, what is written on energy bills, who can be contacted to get help, and so on. This poor knowledge is an aggravating factor when one is living in energy poverty.

In some cases, the person receiving an unusual bill just does not understand what happened. The common idea is then that "I must be responsible". There seems to be a link between lack of self-confidence, a tendency to trust authorities or administration better than oneself and being in a state of long-term scarcity. Another common scenario is that people are confused by receiving too many bills: provisional electricity breakdown, final account, reminder of the bill, formal notice... they sometimes do not know which bill they pay for and finally end up asking for help to a social service, but in the meantime, the delay costs have significantly increased.

The complexity of the energy bills, the lack of understanding the link "what I consume - what I pay" came up several times in the three Regions. And when people see how much energy they have consumed, this amount does not always mean anything to them:

- *[Interviewer, while watching the energy bill]: "On a yearly basis, your energy use is 3000 to 3700 kilowatt hour."*
- *[Interviewee]: "Yes, I have no... No clue if that's too much or too few or anything..."* (Renate, Flemish Region).

Even social workers can have difficulties to understand bills, as Vera explained.

"And those bills from [the grid operator], they're not comprehensible. 'Cause that lady already called [the grid operator] a hundred times, to get information. She can't understand it herself, that lady from the Public Centre for Social Welfare." (Vera, Flemish Region).

To understand how a thermostat or the prepayment meter works is yet another thing.

Finally, the lack of budgetary resources allocated to the social welfare sector can seriously affect the quality of the services of some administrations and the image people can have of them, preventing some people from using some services and from claiming their rights. A lack of resources entails a long waiting time in the processing of files of people in an emergency situation. Staff turnover is another issue and can create a source of bureaucratic harassment, already important in the everyday lives of people in poverty. They must then re-explain each time their situation, a repetitive telling of a pain already painful to live.

"The social worker had warned me that it would not be resolved within weeks (the replacement of a boiler in a breakdown), nor even in the months to come, but this procedure I launched in February and I'm not even sure that the file has been accepted. It's a long process, they give you appointments but sometimes, between appointments, there are several weeks of waiting. The reason is that the Public Centre for Social Action is saturated with requests. From my point of view, my file is urgent but according to their criteria, they have piles of emergencies. Here I await the answer" (José, Walloon Region).

Having the right information, at the right time, and being able to relate to a relative's positive experience is very important. Many participants seemed to have discovered the existence of certain advantages quite late, and only by chance, like Rose (Brussels Region) tells: *"Here it really is by word-of-mouth: "I heard there is a bonus, you should go to this place"... there is not a lot of information"*. Mireille is very grateful to [an organisation that helps people with their dwelling problems] for the information that they gave her, she does not know how she would have done it without them.

- *"Yes, yes. It, it really helped me a lot! It... opened my eyes, it made me understand a lot of things, I was a beginner, I didn't understand a thing about... what was the administrative procedure to go through to get... I didn't know anything really! If it wasn't for the [an organisation that helps people with their dwelling problems], I... I didn't know anything."*
- *I: You had never heard of the [renovation] bonus or...*
- *No, no, no. I had never heard of the bonus"* (Mireille, Brussels Region).

Related to this, is the problem of the non-take up of rights. The research showed that the social tariff is not very well known. This is less of a problem than it might be because it is granted automatically in most cases. However, other rights, like the 'social allowance for fuel oil' have to be obtained by contacting the Public Centre for Social Action. Especially for consumers who do not have contact with social workers, it is difficult to realise their rights.

Another problem is that procedures to claim rights can be very complex and time consuming. Sonia tried to get a mortgage in order to install new windows, but her file has been rejected two times. It was very difficult to fill in all required forms, even with support of a social worker:

“That was a really complex procedure. But I’ve, together with [a social worker]... I think we’ve been busy for 2 months and a half to get all the papers and files... (...) And when you have systems to help people, like a free loan, but you make the administrative way leading towards it that complicated... That even I, with a clear mind, knowing how to handle things, well informed, ... All stuff that average poor, not even average poor, just average people, aren’t. If I already have a problem with it, how should someone else...” (Sonia, Flemish Region).

Not understanding what is written on a bill or being lost in complex administrative procedures to get a renovation bonus can be a key factor to aggravating energy poverty. It can result in having to pay recall fees and/or fines, and in not having access to help that the person in energy poverty is entitled to receive. Furthermore, these administrative problems may accentuate negative feelings, like powerlessness regarding the situation.

2.4 Comparison between the three Regions

The results from the Brussels Region show that lack of insulation is seen as the main cause of energy poverty, whereas interviewees from the Flemish and the Walloon Regions first mention the cost of energy. This may be due to the differences in interviewee profiles among the three Regions: indeed, there are more pensioners and disabled people in the Walloon and Flemish samples, who remain most of the time at home, which forces them to heat their home much more than workers. Also, due to the interviewee selection process, some of the Brussels’ respondents have income above the mean of the three samples, which can partly explain a less stronger discourse about energy prices (with higher incomes, one does not care as much for that kind of expenses or does not feel the same discomfort). Therefore, there are no significant conclusions that we could make about differences between the three Regions.

2.5 Gender and generation aspects

In this research, special attention is given to gender and generational aspect to see whether generation or gender can be linked to factors causing or aggravating energy poverty.

Regarding the question of generation, the interviews showed some evidence that generations play a role in aggravating energy poverty. Indeed, more advanced age can make the person less resilient to the challenges that the situation of energy poverty puts in his/her path, and thus complicates the overall situation even more. Furthermore, older people are more prone to have health difficulties and to spend more time at home, both generally requiring more warmth. On the other end of the age scale, being young could mean having more difficulties in finding jobs, which would make their situation more precarious. These findings corroborate the results found in other countries.

When it comes to gender, we found few differences in the experience of and practices related to energy poverty. However, it appears that the issue of energy poverty may accentuate gender stereotypes and gaps. For example, single parents, who are mainly single mothers, prioritise the well-being of their children. This can oblige the woman to quickly rent or buy a dwelling (“emergency buyers”) even if it is damp and/or not (well) insulated, in order to secure a roof over their child(ren)’s head. It also appears that being a divorced woman can have a differential impact on an already precarious life.

Of course, costs increase with the number of households’ members. In our sample, 21 persons were lone parents, including 18 single moms. According to Wagener (2013), 30.7% of lone-parents have home dampness issues in Belgium, and 42% of tenants of social dwellings are lone-parents (Wagener 2013: 25). In Brussels, it is particularly difficult to find a

dwelling with more than one bedroom and if so, it is (much) more expensive. Thus, people with lower incomes are not likely to have the legally required space to welcome their children, which is a big issue, especially for lone-parents. This situation, combined with racist behaviour of certain landlords restricting access to the rent market, can lead someone to buy in a hurry a house that is not in good conditions, as Mireille explicitly expressed it. She could not have afforded much better considering her budget for giving shelter to her three kids. 2006 statistics show that over the life span, women are 15% more at risk of poverty than men, and as high as 36% for women between 50 and 64 years old compared to men in that age category (Bernard 2007: 8). In addition, women tend to be significantly more “financially dependent” than men.

Another finding is that, within the interviewed couples, taking care of the house, managing the budget, and if needed, asking for financial help are mainly female tasks.

3. EVERYDAY PRACTICES WHEN LIVING IN ENERGY POVERTY

3.1 Curtailment practices

With all the technical and material factors mentioned above, living and maintaining an energy poor dwelling is challenging on a daily basis. This section focuses on the practices developed by the people interviewed in the three Regions to overcome, whether more or less, the problems faced.

Many interviewees drastically limit the use of energy to avoid dealing with excessively high bills or, in Flanders and in Wallonia, with a breakdown of the prepayment meter when it is empty. This self-restriction concerns directly the notion of hidden energy poverty.

“I am obliged, I am obliged, my financial means are very, very limited. My health does not allow me to work much, at least now. I am forced to juggle, in fact, I cannot exceed too much since the prepayment meter, at one point, it will be cut” (Clarisse, Walloon Region).

Of course, heating practices are mainly affected. One does not heat as long as there is a bit of heat in the room, one stays under the bed covers on the weekend, one puts a layer of clothes in addition rather than heating an inefficient dwelling because one is conscious that heating more will not allow being warmer.

“No, I’d rather say to my kids: ‘put on an extra jumper, and put on an extra duvet’, than raise the heating. Since, whether I’d put it high or low, it just doesn’t get really warm here. And then money would really fly... You just can’t get it warm” (Martine, Flemish Region).

The welfare of the children is a central concern: the heating source is switched off when they go to school and is switched back on when they come back.

“I’ve put it a little open to ventilate, and later when the kids come home from school, I will turn the heating on a little. So that, when they enter, it’s a bit warm” (Adrijana, Flemish Region).

Energy poverty shrinks the space available. People live differently in a room that is heated with a supplementary heating and that is insulated from the rest unheated by closing the door or installing a thick curtain, they use the room as a living room or vice versa. The room thus occupied is then likened to a fortress erecting protective walls against the cold.

“I also look...In the evenings...I’ve made a small sitting-room in the smallest bedroom. I don’t have much there...An oil stove...And I put that on when I turn the heating at 17 degrees” (Sandra, Flemish Region).

This spatial self-limitation can aggravate a state of failing health and prevent one from carrying on one’s “normal” occupations.

“Living with this extra heater, it prevents me from living normally because I spend all the time from the hot to the cold. To put me to draw under similar conditions, it is not possible, even if

I put several sweaters” (José, Walloon Region).

In some cases, it is difficult to say whether this self-limitation is linked to the precarious financial situation or habits resulting from education, or maybe both, as it is better for the self-esteem to present oneself as used to being resilient.

- *[Interviewee]: “It’s true that it’s cold in the winter, but... we never heat the bedrooms, never, never! Because it’s not healthy.*
- *[The sister]: As kids, we didn’t have any heating so...*
- *[Interviewee]: I never put any heat in the bedrooms and... we heat here [the living room].*
- *[Interviewer]: Is it by habits or to save money?*
- *[Interviewee]: No, it’s by habits; we aren’t cold. (...) We rarely turn the heat on in the bathroom, rarely, rarely!” (Micheline, Brussels Region)*

Many interviewees have to adapt their everyday habits. The cooking practices can be greatly impacted by the technical and material problems of the dwelling. The low quality of a heating or electricity system can have an important impact on an energy bill, and on everyday practices as well.

“Ah, I have a huge bill at the end of the year. Besides, I was cooking with big hobs and there were four of them, it consumes. And I did not even have hot water so I was heating the water in a pan to wash us” (Clarisse, Walloon Region).

Marie-Rose, for example, lives in a non-insulated social dwelling in the Walloon Region, where the internal temperature is so low that she can visually notice it through edible oil that becomes turbid.

“The floor is very cold, the bathroom is very cold. And I tell you, the kitchen, I had oil that froze in the bottom of the sink, to tell you it is cold. And yet, it has not frozen outside but there, the oil is all trouble, to the limit, no way to use it (...) There is not much insulated (...) The facades are porous, there is moisture, it makes a lot. Here, if the houses could be maintained a little better ... but this is not the case” (Marie-Rose, Walloon Region).

3.2 Severe self-restriction practices related to food, health and so forth

In general, households interviewed live with very limited financial resources. Many of them have been in debt or are in debt, as shown above. Severe self-restriction practices can be a consequence of energy poverty, but also of a limited budget. The cause is not always easy to distinguish, as they are closely related. When people have energy debts, they restrict themselves in other areas (Anderson, White & Finney, 2012). Similarly, those living on low incomes also restrict their expenditures (McKendrick et al., 2003).

Many interviewees reported not having the opportunity to eat their fill. In this case, they deprive themselves of vegetables and fruits, and buy cheap things like bread, pasta, rice, oats. Some do not even have the means to buy bread.

“I have a very tight budget and sometimes I am reduced to eating boxes of rice pudding or oatmeal (...) It often happens that I do not eat enough to satisfy my hunger. Given the current prices surge, I cannot. Even sometimes bread, I do not know how to buy it” (Christophe, Walloon Region).

The parents deprive themselves of eating so that the child can eat. As can be seen, there is a hierarchy of values that is set in place. In this case, the well-being of the child is paramount and above all else.

“I have already been hungry but I give priority to my son, I do everything to make him not hungry” (Brigitte, Flemish Region).

In addition, some people do not have the means to take care of oneself properly despite a particularly developed social security system in our country.

“Here I have to go to the dentist to replace a device I have in my mouth. I cannot even pay for it. So, every day I glue it two or three times but the problem is that when I drink too hot, it comes off. I have to reattach it every time because it is broken in two, I do not know how to

do otherwise” (Jocelyne, Walloon Region).

The purchase of clothes, leisure and holidays are impacted, which is especially difficult to live for families with children.

“Yeah, and they [her children] have to do without anything for five years now. They know that the clothes they wear are donated. Going on holidays? We can’t. Visiting a theme park? We can’t” (Cindy, Flemish Region).

Basic furniture, essential appliances such as a fridge or a washing machine cannot be bought.

“I did not have one [a fridge], I stayed four months without fridge. When I moved in here, I bought a 30 € refrigerator second hand but it burned, so, by that time I bought everything. Only two months ago, I had my fridge there. I bought it 80 € but too bad, I did not have the choice. Without a refrigerator, it is not possible (...). Without a washing machine, it is a hassle. I have already been three years without a washing machine, I had the opportunity to have one given to me, it lasted one week and then it was over. I was well advanced in my laundry but there, it starts again” (Brigitte, Flemish Region).

3.3 A focus on practices with a prepayment meter

Particularly for cooking, the prepayment meter is also an important challenge in the life of people in energy poverty because of its technical aspects: when consumers are not able to recharge their prepayment meter, they can use electricity only on a limited capacity (10 ampere).¹⁷

“Cooking, that’s with electricity, but that’s a disaster too...Because at 10 ampere, cooking is not [easy]. I can only use one burner at a time. Because my landlord has recently installed a new cooking-stove, on induction. So, making dinner easily takes an hour, an hour and a half, and you can’t turn on the light, you have to unplug the fridge...” (Cindy, Flemish Region).

Some other practices can be modified too. Indeed, Martine, who lives in the Flemish Region did not send her children to school, as they could not take a shower because they had no hot water. She blames the prepayment meter system for it.

“I’ve had a prepayment meter at first, but I found it really horrible. Boy, we really had to... I even kept the children home from school since they could not take a shower. You don’t have hot water eh, and all those stuff... You have to charge it. During summer, you have to charge more for the winter... I found it really expensive. They want to help people that can’t pay their bills with it. You receive an offer to go and get such a card, but in fact, it is the most expensive supplier you can get” (Martine, Flemish Region).

3.4 Struggling with dampness: cleaning practices

Living in energy poverty, and having to deal with dampness can make a dwelling much harder to heat, which leads to increased energy consumption. But it can also affect cleaning practices. Alice lives in the Brussels Region, and she has to regularly clean the dampness in her bathroom.

- I: *“Are you pleased with your dwelling?”*
 - Ah no. (Short pause). *It’s in the bathroom (...). But, no matter how much we ventilate after taking a shower (...). But there is nothing more I can do! But to ventilate. And to clean the dampness. (...) I already had my ceiling entirely black, all black, all black”* (Alice, Brussels Region).

Madeleine too has dampness problems and has to clean regularly, even she considers it useless.

“In the cellar, there is humidity, because, again a history of negligence (...) so it was a good ten years that I had whitened the walls, it will be to redo this year. It is black, what is called

¹⁷ The use of this emergency credit and the 10-ampere function are not free. Therefore, if the prepayment meter is not recharged within 60 days, the grid manager can start a procedure to deactivate this limited capacity.

black and I wipe with a cloth but it is useless..." (Madeleine, Walloon Region).

3.5 Practices of 'getting by'

With the few means they have, the interviewees manage to find quick solutions that protect them from the cold. People recover lumber given free but then they must cut it by themselves, or they buy a large quantity of coal when there is a promotion in store, they heat with an electric oven left open or with an oil radiator.

"And the heating... But that was resolvable... You could use a petrol stove... If you place it at a good distance and you target it really well and then you have a blanket around you... That was feasible... You have to see that you don't lean too far to the side, because then you got cold again. But in theory, that works" (Sonia, Flemish Region).

Because of the state of boiler and the gas pipe of her house, Mireille could not heat her dwelling. The solution she found is to heat her house with kerosene lamps.

- I: *"So, you told me that you are heating yourself with kerosene lamps?"*

- Yes, you'll see the... the lamps, I'm going to show them to you.

- I: *Does it work well?"*

- Well..., you've to be careful, it's working alright, it heats, but when you're here, you heat here. So, if you're in a bedroom, you heat the bedroom. It can't heat the whole house simultaneously." (Mireille, Brussels Region).

They caulk the house by closing the curtains, protecting the bottom of the doors, by "tinkering" a system of insulation of fortune.

- I: *"And before, what did you do to try to save heat?"*

- I used to put, you know, the small dog that you put in front of the doors?

- I: *The draught stopper?"*

- The draught stopper, yes, I used to put those. And also, with some duct tape on the window, and even once, at the end, I had to add cardboard because... I put some duct tape, plus some cardboard ... but euh...

- I: *You used to caulk?"*

- Caulk, yes, I used to caulk, yes" (Rose, Brussels Region).

These creative strategies unfortunately do not always work:

"I've put some plastic foil, that bubble wrap... against it [the window]. They say it insulates, but I don't really notice anything. (...). The same with my door handles... There are towels, but it doesn't help anything. All doors have draughty splits. I've had those strips, they're of little use, they don't hold on to it. In the long run, you have to adhere three strips, that's not practical. I've tried it, but because it's that skewed, I don't even get it in" (Julie, Flemish Region).

One can protect one's body by wearing extra clothes, even in bed, adding blankets, buying a heating pad or a special anti-cold blanket.

"When the wind blows to the West, for example, on this side, there's the curtain moving. In some places, I already sprayed in foam insulation (...) In my room above, I bought a woollen mattress for the winter. But I add, I bought this in the pharmacy (...) I put that between the sheet and the cover, it is made of alpaca wool" (Madeleine, Walloon Region).

Some interviewees frequent public places.

"What I did for example, was when I... That's... Often going to a shop by bike instead of the car, since you get warm, you are longer on the way, and then just going to the shop to walk around over there, since it's warm there" (Renate, Flemish Region).

Getting by in situations of energy poverty is not only protecting oneself from the cold, but also fighting against other related problems, such as putting wallpaper and paint to hide the moisture of the walls or heating a meal by placing it on a heating stove.

"My food, I dare to do it like this: my stove is burning, I put my food on it, so that I don't have to use electricity. It's burning after all, so I can prepare it on it" (Conny, Flemish Region).

All the daily practices described in this section are ways to adapt to energy poverty, whether they are curtailment or severe self-restriction practices, and/or resourcefulness practices. The next section continues on this line by reviewing other coping practices that are less part of the everyday life than the practices reviewed above.

4. OTHER COPING PRACTICES

Every individual has to cope during his life with difficult events, generating stress, to which one must adapt. The ways to adapt to these painful situations are called coping.

“Developed by Lazarus and Launier in 1978, coping refers to all the processes an individual interposes between himself and the event perceived as threatening, to control, tolerate or diminish the impact of the event to his well-being physical or psychological (...) The notion of coping has therefore been introduced to account both for the stable personal dispositions (resources) and the behavioral modalities actually at work in different stress situations (answers)” (Paulhan, 1992: 545, 547-548).

In the case of energy poverty, the households interviewed use a variety of strategies to cope with their situation. Besides the daily self-limitations particularly but not only in the use of heating, and the resourcefulness practices, as reported in the previous section, the most recurrent practices reported are the following: dangerous alternatives, solidarity, use of social services, and enhancing one's knowledge and skills.

4.1 Dangerous alternatives

A few interviewees told us about the use of dangerous alternatives to deal with their life in energy poverty. Among the few practices they communicated, there are the following: use of gas bottles (a potential source of explosion), oil heating (which releases outdoor particulates and produces odour), and blocking ventilation systems (which can be a source of poisoning).

“There I have an electric stove. Perhaps I will buy at least one gas stove by the end of the month because electricity costs too much. So maybe I'll start buying gas bottles” (Mutumbo, Walloon Region).

“I have a small oil heater but it is not good to breathe” (Catherine, Walloon Region).

- [Son]: *“Behind this frame there, there is an air vent... when they came to install it, we told them “How is it possible to install an air vent right above the heat?”*

- [Interviewee]: *Yes, right above the heat! I put a frame in front of it because otherwise my heating isn't... it isn't worth it because everything goes that way! (Designates the air vent). They say it's for the carbon monoxide... whatever.*

- [Interviewer]: *You don't fear intoxication?*

- [Interviewee]: *No... Huh no, I'm still here, right?”* (Micheline, Brussels Region).

A few play the role of the heating installer to repair the boiler, maybe at the risk of getting injured or causing serious damages.

“So, when it [the gas boiler] cuts off, I put some water back in but I do not dare put it back too much. After it goes as long as it goes and then one day it cuts and I put some water back. Here, when there is a strong wind, it cuts off and after it calms down, I reset it and it starts again. (...) At first, I did not even dare to go there because it has a scary side” (Christine, Walloon Region).

4.2 Making use of social services

To solve energy problems, people in energy poverty search help mainly in the Debt Mediation Service and/or the Energy Unit of the Public Centres of Social Action (not all the Public Centres of Social Action have such a unit), or in specialised aid organisations for people living in poverty, charitable associations, or in public offices providing energy advice.

“I called to the “house of energy”, because, well, I used too much energy. Actually, I thought

my bill was huge. (...) I changed the lights to LED. (...) About the radiator, I had a thermostat I didn't understand. (...) It's something and obviously I, I didn't use it correctly, it's still the same, I heated too much, I didn't know how to turn it off, well I mean, I went in circles. [The energy counsellor] is going to put a new one, more recent and simpler" (Jeanne, Brussels Region).

People use social services like energy units mainly to get answers on energy issues or on energy bills or when they could not negotiate a payment plan with the energy supplier.

[Interviewer]: "Does the Public Centre for Social Welfare bargain with suppliers to get a feasible instalment plan?"

[Interviewee]: "Yes. They get it done. Ah yes, I had at that time asked [the grid operator] an instalment plan and it was not possible. That didn't work out, I had to repay within twelve months. But yeah, try to repay an amount of 3000 € within twelve months... So I've said: 'good, I don't pay anything, I'll see what'll happen.' Then I got my prepayment meter. So it came before the LAC [Local Advice Commission] and they accomplished an agreement to repay 25 € monthly" (Cindy, Flemish Region).

Social Housing Societies play a very important role in the fight against energy poverty when they can offer a decent home at a reasonable cost.

"Well, I asked [the social dwelling company]. Generally, there is a waiting list, it can last years. I was lucky, I got a mayor ruling, because where I used to live, the apartment was unsanitary. (...) There were mice, the roof was leaking. I had a little girl, well, today she's 18, but at the time she was 9 years younger. I had papers from the hospital saying... that she had health problems, that, because of the situation, it could make her disease become worse. Thanks to this paper, I had my social dwelling within three months" (Alice, Brussels Region).

4.3 Implementing energy saving advice

Many interviewees apply energy saving advice to reduce their bills and recharge as little as possible the prepayment meter (Flanders and Wallonia) when it is present. To do this, people use CFLs (often called economic light bulbs), install a double meter (day/night)¹⁸, reduce the heating when leaving the house, dry the laundry outside when the weather is nice rather than using a dryer, do not iron all the clothes, use a power strip with a switch to turn off several electrical appliances at once, wash the laundry once a week only on weekends to have a cheaper tariff for electricity.

"Still, I'm careful. It's been years that I hum... I always buy energy-saving bulbs" (Iman, Brussels Region).

"I have all plugs with switches, so, in the evening, I cut everything. Even the phone, it is hooked on so all this is cut. Or else I have a power strip and on the other side also with buttons and I cut all the buttons, so that does not consume" (Christine, Walloon Region).

"In summer, it's okay, we put the laundry to dry out (...) Now that we have economic bulbs, compared to last year, I see a difference. So I say they're not lying" (Chantal, Walloon Region).

"And here I have the night counter too. I had seen an advertisement once, a decade ago. I asked X (the social housing company) and they said yes; they provided it but it was me who paid the 100 €" (Clarisse, Walloon Region).

The education of children on saving energy (and water) is also taken into account by families.

"I keep on hammering about it also. They dare to come downstairs and in the evening the light in the hallway is still burning. I call them always. Even when they're already in bed, I call them awake. 'Hey, the light in the hallway needs to be turned off.' Taking a shower... I've

¹⁸ Paying for installing a night meter reduces thereafter the cost of electricity used during the night and the weekends.

installed a timer a while ago. Because these kids think it's great to stay in the shower for an hour. I've put a timer on it. Not ready for showering? Too bad, the boiler goes off. And so I raise their awareness that not everything is free in life. That's been a hard lesson for them, but they learn it, and they're aware of the value of money at their age" (Cindy, Flemish Region).

Sources of information on energy saving practices are diverse. They come from, for example, the Public Centres of Social Action. Internet and word-of-mouth are also good information sources.

- *[Interviewer]: "Did you learn new things [at the energy saving animation]? Or did you already know?"*
- *[Interviewee]: Yes, how we use the... (Speak to her step-daughter in Turkish)*
- *[The step-daughter]: You see the...*
- *[Interviewer]: The multi-sockets with a... [switch]?"*
- *[The step-daughter]: That's right, you have to switch it off or to unplug the socket... hum... she learned that there"* (Nur, Brussels Region).

Households complained, however, about the administrative burden of aid files and/or the small aid granted by the Public Centres of Social Action.

- *[Interviewer]: "Ah yeah, the energy savers were here. Have you gained something from their visit?"*
- *[Interviewee]: "No, actually not. They gave us these power strips, a few light bulbs, a showerhead. The social worker showed a few things, like the boiler and when those windows were being placed. (...) They've controlled everything. They come once and that's it. They give a little advice and that's it"* (Adrijana, Flemish Region).

Some interviewees do not want to apply the measures because changing habits is synonymous with extra stress in an already painful daily life.

"Yes, I've said it...I'm... I'm engaged with it (the environment protection) and I think it's important, but I think that the problems the last few years were so heavy that... Well... That you don't lose sleep over it. I don't lose sleep over it" (Renate, Flemish Region).

It can therefore be understood that, in this context, the application of energy-saving measures is rather mentioned in the interest of budgetary savings rather than for the sake of preserving the environment, although this does not prevent some to feel more concerned about this issue.

"I always took devices A, A+, A... I always choose eco-friendly hum, in the way that... I'm careful. It's, it's... the planet (insists on the word), we are living in it (...) everyone should be responsible of oneself. That's why... I don't consume that much (...) the problem when we buy a device, it's true that it costs 1.000 €, it's expensive for someone who's saying "No, I prefer one at 300, 400, it's... the same performance". But from an ecological point of view, it's better (...) it's an investment, it's the money that I was going to pay for... 5 or 6 years, in the gas or electric bills" (Jasmine, Brussels Region).

4.4 Retrofitting the dwelling

When households are given the opportunity to partially renovate their home, they saw a decrease in energy costs. Tenants are dependent on the goodwill of the landlord, for the latter do not necessarily want to invest in someone else's home.

"Yes, I've heard of it [subsidies for renovations], but it's all for the landlord eh. We can't apply for it..." (Carine, Walloon Region).

Energy-retrofit practices are implemented by Mireille. She lives in the Brussels Region and just got the authorization from the "Housing Fund" to do renovation work in her house: so, she really hopes that the situation will get better.

"When it's hot, it's hot, when it's cold, it's very cold. But the renovation works... I hope that there'll be... because there isn't any (insists) insulation, no insulation right now" (Mireille, Brussels Region).

Sometimes, when retrofit works are done, it does not enhance the quality of the dwelling, as it is the case of Brigitte, from the Flemish Region.

“They’ve [the housing company] installed a condensing boiler here, but if you want an optimal return, then the radiators should have been adapted too. That has not been done, there are still the same radiators. So, half of my return is lost. And the other half is lost through the walls.” (Brigitte, Flemish Region).

Antoine and his co-tenants renovated a house thanks to benevolent friends, ready to share some of their expertise. This peer learning opportunity allows knowledge through a different way than from school.

“I don’t have any particular background, but my father, he tinkers all the time, he has already renovated a house, and I helped. I think everybody is able, you just have to stop being afraid to go for it. (...) We learned a lot, we did some participative building days where some friends with specific knowledge would come over, and we would pair people knowing nothing with people knowing what they were doing” (Antoine, Brussels Region).

4.5 Interpersonal solidarity

Interpersonal solidarity experiences have sometimes strongly affected the people who benefited from them. Interpersonal solidarity consists of material and/or emotional support resulting from human relationships. It comes from the family and/or from the social network, in this case friends, neighbours, charities: one both washes one’s clothes and dines at the in-laws, a neighbour offers to pay for one’s shopping at the store, one gets clothes and food from the charitable associations.

“One day, my neighbour came, I don’t know how, and said “Madam, do you eat enough every day?” I swear it’s true. I said yes but... (...) I started to cry. “Come with me” he said. He insisted and we went to the shop across the corner. He bought frozen fish, meat, potatoes, vegetables, (...) for over 50 €. He brought everything in my house and I said “Sir, I cannot afford for this, I’m not able to repay you right now...” “Madam, do not repay, I don’t want it!”” (Lucie, Brussels Region).

“And finally, over a few days of time, everything was done. It was on Sunday, my brother came with two neighbours of him and the owner came with his pickup truck and he gave a helping hand too. And finally, they have done almost everything. And there, Michel had dismantled it all, he had prepared everything (...) I find that I am very lucky, it’s a bit like that the wheel turned really strong all of a sudden (...) It’s a gift from heaven” (Christine, Walloon Region).

Interpersonal solidarity is also present when the well-being of children is at stake. Family or network solidarity is called for.

“Sometimes, I put my son with the neighbours, so, he gets a little heat. As they also have little boys out there, he stays with them” (Mutumbo, Walloon Region).

“There is only one source of income at home and there are times, at the end of the month, fortunately there is X (the ex-husband of Catherine). When it does not go well, he pays me 50 € and when I have money, I reimburse him. Fortunately, we still have good contacts (...). My daughter went to her father’s house during the winter period and I stayed at home” (Catherine, Walloon Region).

People benefit from solidarity, but they also give it. For example, they help the homeless in the neighbourhood by preparing meals. Or they exchange information about the possibilities of regional aid for the renovation of housing.

“I was talking with a colleague, (...) [my husband and I] realised that even if we wouldn’t go [on holiday], we still wouldn’t have enough [to finance renovation work]. So, we’re talking, and then [my colleague] says to me “you know um, you should go and see... about the renovation premiums”. (...) He says to me “there are offices, there is... a premium office, and my neighbour redid her façade and it cost her... something like 500 €” he says to me. I was like “Wait a minute, you do a façade and it only costs 500 €?” (...) That’s what I was saying to

my neighbour, I said "Listen, you too, you've to go for it, go on because we'll never have this chance again, because there is a neighbourhood contract and our houses are part of the perimeter of the contract" (...) from experience, now I know how to do it and so my neighbour, she'll have the same problems, so we took the lead" (Nadia, Brussels Region).

4.6 Developing knowledge and skills

The functioning of the energy market is complex. Knowledge of one's rights in this context is important to improve one's daily life, like knowing that one is entitled to the social tariff or that one has 14 days to cancel an energy contract signed in a door-to-door canvassing.

"Before, I was a trader, I am aware that we have 14 days to retract when it comes to a door-to-door, before it was seven days." (Guy, Walloon Region).

The information, supervision and support of the precarious public by specialised agencies is therefore paramount. Beside the public agencies or NGO mentioned above, the Internet is considered as a very important tool for those wishing to learn about the subject.

"Yes, the internet is superb. You find everything there. Especially from the internet, since I've noticed that when you go and ask something at three places, you'll get three different answers. And most services, especially when it's a complicated matter... most services don't know it either. So, internet is much handier, you'll find a lot more information, and you can return to the law texts, if necessary" (Sonia, Flemish Region).

Interviewees who are not aware of their rights reported that they requested assistance from the Public Centre for Social Action for a problem other than energy and had been referred to their Energy Unit, which enabled them to be better informed. In this case, the cross-functioning of social services is important to better accompany and therefore improve the living environment of the applicants.

"I went to the Public Centre for Social Action because I had financial worries and I learned that they could help me with my gas boiler that no longer works" (Martine, Flemish Region).

To reduce their energy bills, some households compared the prices charged by energy suppliers, either spontaneously or on the advice of specialised services.

"I can now compensate it by going to [supplier X], since I have to pay € 50 less. Well, € 60 or maybe even € 70. But that's a great difference, I think, I will really feel that monthly, that it's a lot less. And then, I'll be able to set aside € 50 or so, so that, would there be any problem, I'll have at least that. This year, I have kept in mind to try saving a few hundred euros for electricity for the final invoice, even though it would be difficult, because otherwise you'd get a prepayment meter and all that shit" (Julie, Flemish Region).

Some do not wish to make this comparison because they are suspicious of energy suppliers. They therefore prefer to remain with the one they know.

"The energy suppliers, they can make war, one promises such a thing, the other promises another thing, they are all the same, anyway ... I do not stop to have visits (...) They promise wonders and, conclusion, it is the same everywhere. So, I never changed supplier, I never wanted. I say, at least, I know what I have" (Marie-Rose, Walloon Region).

There is a general knowledge of the functioning of the daily energy supply. For example, households know that electricity is cheaper overnight or that a fridge consumes more when it is empty.

"You have a fridge, you would better have it full than empty. Because, when it's empty, your energy consumption is ten times higher. People that have a freezer that's not full, should put empty boxes in it" (Paul, Flemish Region).

In rare cases, households report having a certain amount of personal and / or professional know-how which enables them to cope with the challenges of life in energy poverty, such as cutting wood, insulation work or installing radiators.

"My husband did the installation of the radiators himself" (Carine, Flemish Region).

4.7 Gender and generation aspects

With respect to coping practices, we did not note any particulars concerning generational aspects. The issue of gender in coping was raised in two areas. First, we note that energy-saving measures dedicated to the house are more particularly implemented by women. Second, activities requiring physical strength are primarily carried out by men. This does not necessarily mean that gender stereotypes are accentuated in the context of energy poverty. Indeed, this information was spontaneously communicated by only a few interviewees. It is therefore difficult to draw any valid conclusions.

5. FRAGILITIES ASSOCIATED WITH ENERGY POVERTY

People living in energy poverty experience other types of fragilities.¹⁹ These are not always linked to their energy poverty situation, but in any case, they contribute to its aggravation. Health problems, poor well-being, social isolation, and mobility problems are the most commonly expressed issues.

5.1 Health

Health problems often came up spontaneously during interviews, which is a good proxy of their importance. Chronic diseases, disabilities, and mental health problems are all reported.

Having poor health can lead to pay higher energy bills by forcing the person to remain more at home with sometimes a higher temperature level to help manage the health issue. Having a failing health condition or managing one of the family members may also require stopping working. This concomitant loss of income creates a situation conducive to energy poverty.

“Yes, I worked there for a long time, then my son had a somatic crisis, at one point he couldn’t walk anymore. (...) I used to..., I was picked up to go to work with him, it wasn’t funny. And then I decided to stop working” (Jeanne, Brussels Region).

It is not obvious how to establish a verified relationship between pathologies and life in energy poverty. For some households, however, there is a clear causal link between respiratory illnesses that they or their family members suffer from and their life in energy poverty. This fact has been largely corroborated, on the other hand, by numerous studies (Wilkinson et al., 2001; Ezratty et al. 2009; Hills, 2012).

“My son...That’s every two weeks that I’m at the doctor for his respiratory system and she [the daughter] has also much trouble and I think it’s due to the moisture. My health has also really deteriorated since I’m living here. I’ve lost much weight and they don’t know for what reason. So I ask myself sometimes: ‘is it not due to the bacteria in this house?’ It’s not healthy to live in a moisty house, and I’m at home often, because I’m a housewife, and I think: ‘maybe the house is making me sick?’ A lot of people come here and say: ‘I would be sick if I had to be here all day...’ Moisture and mould, that’s really not safe for the kids. We are grownups, we can take it much better, but a child... A child does also not understand that (s)he can’t touch the wall” (Julie, Flemish Region).

Others note that some of their health problems get worse, either because of the cold in which they are living continuously, or because their energy insecurity prevents them from taking their medical treatment or delays it.

“Sometimes I postpone my own medication, just to be able to pay for the medication of the kids. Sometimes I should see a doctor, when one of the kids is ill...I have an aspirin or a paracetamol at home, let’s try that first. I can’t say: ‘let’s go to the doctor’. Even if the doctor would only cost me one euro, that euro is indispensable. Halfway through the month, my

¹⁹ We first used the term of ‘vulnerabilities’ for these difficulties and impairments associated with energy poverty. However, in the current academic literature on energy poverty, the concept of energy vulnerability is defined in a precise way by Bouzarovski and Petrova (2015: 35) as follows: “a set of conditions leading to such circumstances (...): it highlights the factors that affect the likelihood of becoming poor. When combined with the systems of provision approach, energy vulnerability (...) [encompasses] the nature and structure of the home (...)”.

money is finished" (Cindy, Flemish Region).

One of the interviewees in the Walloon Region reports that she does not dare to heat too much to prevent the prepayment meter from breaking down, which she calls a "nasty surprise". She prefers to take her trouble in patience rather than not having any heating at all.

"Now I have osteoarthritis. So, I had set a temperature that was comfortable for the pain but I saw that I was forced to decrease a little. So, I took it out on myself but it does allow me to avoid a bad surprise" (Anna, Walloon Region).

Adults regularly report fears about the consequences of cold and humidity on children's health.

"I was very ill at one point and I made a lot of bronchopneumonia, I had to go to the hospital (...) I say that it is due to the heating problems that I had previously. Even now I am still paying the consequences (...) that's why I preferred to leave because in addition, my daughter is disabled, I'm afraid that it falls on her too." (Catherine, Walloon Region).

Mental health can also be impacted when one is not making ends meet. Managing the multiple administrative steps of an application for financial assistance for a renovation, as in the example below, creates additional stress that can lead to a depressive state.

"At one point, I got sick, I think I was, I was so weak, I just caught a lot of stuff. (...) I never had the flu like that; I had it twice in a row, but a huge one. (...) I really felt that I was empty; I was really tired, physically and mentally." (Nadia, Brussels Region).

5.2 Poor well-being

Living in energy poverty involves a broad range of feelings and emotions that the affected persons have to deal with. The interviews showed that it implies mainly negative feelings. The feelings voiced by the participants are injustice, depression, stress and lack of confidence, fear, powerlessness, and the feeling of being stigmatised and ashamed. Some interviewees also showed positive emotions such as pride or feeling lucky. These feelings can relate to society in general but in this section, we try to focus as much as possible on the link with housing and energy.

5.2.1. Injustice

Through the discourse of many interviewees, feelings of injustice and unfairness are clearly present. We found examples about prices, solar panels and waiting lists for a social housing.

People who already suffer from energy prices utter their indignation when they hear on the news that energy prices will go up. When the interviews took place, the Flemish government had just decided to raise taxes on electricity in order to compensate for the loss made by (over)subsidizing solar panels. Quite a lot of interviewees found this decision unjust:

- *"Like those solar panels and stuff now, I think it's unfair that we, people who have nothing to do with it, have to pay for it. I think that's not correct. That we, people who don't have anything themselves... for those who can afford for themselves solar panels for their own house... And we should pay for it... Well, I mean..."*

- [Her husband]: *"We can't install them eh..."* (Maria, Flemish Region).

"We have to stop taking people for fools when we say, for example, "Ah, solar energy, solar energy", they offer premiums for solar panels and tax them just after, it's really stubborn people (...) Now, where I disagree, is that these things, it costs a certain price and it always remains reserved for some elite." (Anna, Wallonia).

Some interviewees refer to injustice in the housing market. They have the feeling that the houses of the social housing companies always go to someone they feel is less in need.

"But social housing, you don't count on it for the first three to five years. I'm [on the waiting list] for three years already, I think there's no logic. I think it's quite unfair. Now, with the social rental office, you can rent cheaper, for 100 €... I'm in the third place since a year now."

Then I get a letter, the house is always going to someone else.” (Julie, Flemish Region).

The procedures and communication when a renovation is undertaken by the social housing company can also be the source of discontent:

“Here [in the same building], there’s a man who’s 90 years old... he’ll have to go! Yes but... it’s not ok like that, I don’t think it’s... I don’t know, they don’t care about people. (...) Some people say that [the social housing company] is saying “you’re not happy, go somewhere else” (...) We have been living here for over 30 years, and overnight they say “you’ve to move out” ... All this because they’ve to install the central heating... and we can’t move back in the apartment afterwards... I don’t agree with that (...) they’re dishonest with people, dishonest... they don’t have any respect. The people from nearby, they got their letter in January... in January! And they were told “you must be gone by August, the apartment must be empty” so they’ve given us 6 months.” (Micheline, Brussels Region)

5.2.2. Depression, stress, lack of self-confidence

It is hard to separate the psychological distress caused by energy poverty from the mental distress as a consequence of poverty or other circumstances in general. The constant puzzling and dealing with bills, court files and bailiffs are omnipresent.

“You’ve got a lot in your mind, for me, it was judicial... There were moments when we came to live here and I had... I was busy with five or six court files. OK, you’re not busy with it, it’s your lawyer that’s occupied with it, but it’s something that engages you mentally. And if you have to do your housework, you have to care for three kids, you have to be aware that they go to school and you have to go to work... I’ve tried it a few times, but the concentration is... All your attention is engaged by making ends meet, there goes a lot of energy in it. That takes most energy, seeing ‘how can I make the end of the month?’” (Renate, Flemish Region).

We also found examples that relate directly to energy poverty: a person got a vagal attack after being the victim of a door-to-door scam; recurring problems with a boiler damaged a person’s sleep quality and mental health; other persons got dispirited from filling the administrative file to get renovation bonuses to insulate roof and windows. These circumstances and events make people feel depressed and absorb all their energy. With this in mind it is not surprising that an interviewee did not have the strength to question a 40 € reminder cost for an unpaid bill that expired only a few days before. The Public Centre for Social Action can be a last resort:

“For the life I lead, I would not want to be there anymore. However, I am not someone with a suicidal tendency but ... (...) I probably do have depression but I cannot even cry, I cannot do it anymore. I do not have anyone to count on except the Public Centre for Social Action.” (Malette, Wallonia).

Indeed, some people with very low budgets and/or very bad dwellings have no options for saving energy than other being creative, finding short-term solutions, tinkering or asking for help. But all these abilities demand energy, optimism and self-confidence to improve the situation, or to have the courage to admit one’s distress to get a chance of being helped.

5.2.3. Fear

For our interviewees being unable to pay is a cause for feeling anxious. Some do not dare to open their mailbox, which is seen as a box full of bad surprises; others do not pay their bills because they do not have the money and wait anxiously for the consequences; a person specifically mentioned the final bill, which could easily amount to a few hundred euros. An unexpected example of fear was given by a person who was feeling anxious that she could not pay for her electricity (with a prepayment meter). Having no electricity would imply that her freezer would defrost, which contains a lot of food and vegetables mainly received from other people. With this stock, she could survive a month without having to buy food. So this food means for her a ‘capital’, and defrosting would be a ‘disaster’.

Very often, our interviewees feel fearful because of the state of their dwelling. Some complain about the building construction:

"We're always afraid too because, well, as madam [the energy counsellor] told us, there are pieces of the front wall that are deteriorated and might fall. We're always afraid, because if one day it falls on somebody and if that person sues us in court, we might have a great deal of money [we have to pay] ..." (Lucie, Brussels Region).

"Yes, that bedroom, that floor is actually not safe... Cause the kids sometimes ask to play upstairs and I can hear them jump and I think: 'in a minute they fall through the floor.' Lately, they just play downstairs, so I'm reassured... When they're just sleeping, they'll not fall through it, but when they're jumping... I only weigh 53 kilos and even my heel went through the floor, I was really scared to death. I only had to take a few steps and I put my foot inside and it just went literally 'crack.'" (Julie, Flemish Region).

Other relate directly to energy: an outdated electric system, which might cause fire, and the presence of mould.

"But in this house, you can't do anything, it's not safe here. The best you can do is not to touch anything. I live in poverty, between moulds, Eternit panels, bailiffs" (Paul, Flemish Region).

"In the bathroom I put some special tape against the wall, hoping that that would maybe...But even that is starting to come off. And again that dirty, filthy look behind it...It makes me sick to go in my bath. That's terrible. I can't relax in my bath, I lie in bath and I think: 'no, I'd rather take a shower.' Just being disgusted with your own bath, that's terrible. And you can clean it with whatever you like. That mould does not disappear with any product." (Julie, Flemish Region).

And last but not least, there is the fear of being forced to leave the home, after a renovation or in case of payment default. The fear of being homeless coincides strongly with the feeling of powerlessness.

5.2.4. Powerlessness

Some of our interviewees report that they feel powerless and, in many cases, this has to do with a lack of income, the fact of being a tenant or the limitations of the housing market when one wants to move. When you have a broken boiler and no money to fix it, you have a problem. Someone witnessed that the Public Centre for Social Action can send a repair person, but when the heating system is unrepairable, there it stops.

Tenants often feel constrained because they cannot change the quality of their rental house. Examples are numerous: they do not want to invest in someone else's house, since the benefit of their investment would go to the landlord; they cannot choose the colour in which a social apartment is repainted; they have no involvement in the decision of the installation of a double meter (day/night) or the installation of less consuming electrical equipment; they cannot mitigate moisture problems.

A couple of interviewees feel powerless because they cannot move. We heard various reasons: moving is costly (transportation, refurbishment...), a debt mediator that does not want to give the permission to move, someone prefers to stay in her 'dump', rather than taking the risk to be homeless with three kids. This last argument concerning the fear of being on the streets came up more often, especially when people already had experienced homelessness. This fear prevents people from starting a procedure in order to get the dwelling officially labelled as 'uninhabitable'.

"The Public Centre for Social Welfare in [his city] suggested me, as well as the social housing company, to start a condemnation procedure, in order to get priority for social housing. I was informed of the risk that nine times out of ten, it would not be accepted, and I could become homeless." (Paul, Flemish Region).

Most of the participants feel like having no grip or power over their dwelling situation and generally over their life. The feeling of powerlessness can make it even harder for people to improve their situation. Indeed, why even try if you feel like you have no power over things that are happening to you?

5.2.5. *Feeling stigmatised, shame*

Having to live in poverty can cause people to feel ashamed or stigmatised. This can happen on different 'levels': in front of the neighbours, in front of 'the people' and in front of the Public Centre for Social Welfare. Again, this can relate to general circumstances or to energy poverty directly. In the first category, we noted stories about stigmatisation by real estate offices and landlords, who are averse to people with a tenancy deposit from the Public Centre for Social Action; about people that are on sickness benefits and labelled profiteer of the State; about closed curtains to hide away the meagre inside. In the second category that is linked directly to energy poverty, some interviewees said that having to reload the prepayment meter in a central charging point is stigmatising. Certainly, in small villages people will try to leave as soon as possible. Informative leaflets that are put out with the best intentions will probably not be read.

The power of shame should not be underestimated as the next quote illustrates.

"You know that I did pay myself for repainting my front wall! (...) All the houses that you see which are filthy grey, you can tell that these are houses from the [social housing company]. You can't miss them! I couldn't stand anymore to have this label..." (Annie, Brussels Region).

Another person does not want to ask for plastic film to insulate her windows a little, even if she claims that it is the responsibility of the social housing company. Does this tend to indicate that to her, the (fear of) stigma is even worse than being cold at home?

"They say: 'But you have a right to it, you have to ask.' I will not ask because she [the social worker] will break my moral ten times more. And I prefer to suffer than to be demolished, to break the little force I have left." (Anna, Wallonia).

If someone is feeling stigmatised or ashamed by his or her own precarious situation, s/he might want to avoid claiming the help s/he has a right to, either the institutional help provided by social services or even simply asking for help in his or her social network. This underlines the importance of taking into account the experience and feelings of people in energy poverty when trying to mitigate the problem.

5.2.6 *Feeling lucky*

Although our interviewees have quite a lot of negative feelings, they also report positive emotions, such as resilience or pride in managing their situation. They describe themselves as being inventive, able to be very economical when using energy, and able to manage their debts or to fulfil a payment plan. Frequently one's own situation is being compared with that of others, in order to feel better. 'There are people that are worse off', 'There are people outside without a home', 'I am not poor, I have a home and a roof', 'It is better than living in a social housing block' ... are often heard.

Some people just try to be satisfied by lowering their standards or by stressing the positive aspects of their dwelling. The heating system is malfunctioning but the house is well-insulated, the insulation is bad but the location is central or it is allowed to keep pets, this home has a better insulation than the previous one.

5.3 Social isolation

As already mentioned, self-restriction practices lead to social isolation. Many interviewees talk about their loneliness and their difficulties in maintaining social links. This social isolation can be due to different reasons: introverted character, traumatic experience because of a

migration history, superficial neighbourhood relations, no more family and, related to energy poverty, shame about the state of the dwelling.

Many interviewees have poor relationships or non-existent relationships with their (extended) family. They lost friends because of health problems or a sharp decline in their standard of living, for example following a bankruptcy.

“My family left too. (...) You know, I had a bankruptcy... when everything is fine, you’ve a lot of friends, once the situation is bad, just a few stay... so to speak, nearly none. So, there are a lot of acquaintances that I don’t have anymore. Just my girls (...) Except for them, I still have a pal that I see once every other six months... I’m surrounded by my daughters...” (Kristof, Brussels Region).

It is difficult to claim that social isolation is directly related to the situation of energy poverty. Nevertheless, it is evident that people who have a poor social network find it more difficult to mobilize support for psychological or financial support when facing that kind of situation.

It is not easy to have a social life when one does not have enough money since inviting and being visited at home often mobilizes budgetary resources. One does not do it or has to compensate later by depriving oneself for something else.

“You consider it a bit. Well, I tried, when I did it [inviting friends over]...I try to compensate with other days... Putting less heating on at other days, or buying less for yourself, well...I say it: it’s not much, I don’t do that often...” (Renate, Flemish Region).

The shame of living in substandard housing does not encourage socialising with others. One is afraid that this will be known, even in relation to the close family.

“How do you expect me to invite someone to eat in an apartment where I have been already asking for a flush, where there is moisture everywhere? (...) How can I invite someone in?” (Anna, Walloon Region).

5.4 Mobility

Mobility is also affected. Households do not have the means to get a car or to get rid of it when it costs them too much. Others try to spend less money on fuel. Cost of public transport can also be problematic, and such journeys take longer, especially for the persons having health problems; if possible, the help of a friend or relative is then necessary. These mobility problems contribute to social isolation because it is difficult to get a job or to visit family and friends:

“I have no means of locomotion. To go to the hospital, it is the van of the Public Centre for Social Action that comes to pick me up until December 31, after I have no more right. Unless it is renewed. And a taxi is 6 €. This trip, I cannot. I do it once at the beginning of the month but after that, it’s over” (Maria, Walloon Region).

The lack of mobility leads to a dynamic of spatial restriction since one is forced to move only in a perimeter close to the housing. One will therefore more readily seek accommodation close to schools and shopping centres, which is not straightforward insofar as this type of geographically better-situated housing is generally more expensive.

“But if it’s close, I don’t have to take a tram, otherwise I have to pay a card. Everything I have to pay for, I have to avoid. One ticket costs three euros, one way only. That’s valid for one hour” (Adrijana, Flemish Region).

5.5 Gender and generation aspects

We did not find many indications for gender differences concerning the fragilities associated with energy poverty. The platitude that women are colder than men are has one counterexample. Two women said that they feel too hot since they are in their menopause and could not bear blankets.

When it comes to generations, the habits that someone has developed since childhood can influence how one looks at one’s situation. We noted testimonies of people living in homes of

rather poor quality that they consider as a very nice place as compared to their childhood's dwelling. Could we say that the risk of living in energy poverty is being internalised?

Similarly, given their history, some people 'always feel too hot at other places'. Or others only turn on the heat when it has frozen for two or more days. Jozef, who is retired, says that he does not feel cold, even when it freezes outside. On this issue though, we see a variety of feelings, well represented in the next quote:

"I only have one gas stove in my living room, (...) but I don't have central heating, not even in the bathroom. That's... You get used by it, but still, you also get a little older eh." (Carine, Flemish Region).

On one hand, some older people say that they tolerate cold because they compare with their past (e.g. 'when I was a child' or 'during the war', when there was little heating). On the other hand, older people say that they feel more the cold (when getting older, body temperature lowers) (see also Harrington et al., 2005; Wright, 2004; Armstrong, Winder and Wallis, 2006).

6. CONCLUSIONS

The present qualitative approach aims to depict what living in energy poverty is like. It stresses not only specific factors causing or aggravating these living conditions but also shows how much these conditions impact the everyday life practices and the psychosocial and moral standards of people. Although these deterministic factors produce a restrictive life for each energy-poor household, some evidence shows people acting or taking initiatives to try to overcome their situations. These observations help us to describe, in a phenomenological way, how people shape their lifeworld (Habermas, 1987), in other words, their usual way of acting and representing their processes of acting in their environment.

Considering the various aspects collected in this qualitative research, three axes can define the common practices and the lifeworld related to these practices expressed by the people living in energy poverty. These axes are connected to the different usual ways of acting defined by Ardoino and de Peretti (1998). In everyday life, people can act following three possible postures. First, people are often placed in an agentic posture. In this case, one acts according to the deterministic conditions when confronted with one's immediate environment. The agentic posture describes the way people adopt their environment when they are submitted to external conditions (mainly restrictive) which they cannot avoid. When people are reactive against these external conditions, facing adversity and trying to adapt their living conditions to the external adversity, they can be qualified as 'actors' according to Ardoino and de Peretti (1998). The third posture appears when people define the way they can escape their restrictive environment even if they are very constrained and with little space for freely acting. In this case, people use their experience and competence to build new processes or actions that are different from what they used to do. This third posture represents the 'author' position.

In the present qualitative research, when describing factors causing or aggravating energy poverty (section 2) and when reporting fragilities associated with energy poverty (section 5), people living in energy poverty refer to their practices and lifeworld in agentic terms. Energy-poor households are mainly facing material restrictions: lack of money not only for overcoming energy bills but also for facing the costs of everyday life; lack of capital for installing or improving insulation, for retrofit, or for replacing obsolete appliances. Social trajectories also hinder people from having a less restrictive life: difficulties in making ends meet, facing the snowball effects of debts concerning not only energy bills but also consumption debts, rent arrears, or extra costs from paying an invoice late or from using inefficient electrical appliances for instance. These are examples illustrating the expensive conditions that people living in energy poverty are confronted with. Energy-poor households can also suffer from fraud and dishonest practices committed by their landlords, their neighbours or even energy suppliers selling contracts at people's door. Of course, social services may constitute an efficient support for people living in energy poverty. However,

confronted with a lack of self-confidence, with time consuming and endless procedures while living in precarious conditions or with the difficulties in getting the right information at the right time, the energy poor often enter the group of citizens who do not take up their rights. All these contexts reported in our interviews show the different aspects of the lifeworld expressed by energy-poor persons acting according an agentic process in a restricted environment strongly determined by insufficient energy provision. This agentic position is associated with fragilities reinforcing the feeling of losing control or of one's environment becoming increasingly narrow. Indeed, people living in energy poverty often face health problems, and depressive and stressful conditions. Living in a world where they get the impression that they lack the control to prevent difficulties, they often express powerlessness, fear and/or shame. In this uncontrolled context, they have to tolerate injustice, stigmatising experiences or, on the contrary, they feel lucky when they have a positive result in resolving a problem.

The agentic posture is balanced with two other proactive positions. In these cases, people feel that they have some effect on their environment. Two possibilities may occur (Ardoino & de Peretti, 1998: 28): when people make use of their usual practices and competences to face adversity, we say they play a role of 'actors'; much more, when people are trying to develop new competences based on their experiences, we say people act as 'authors'. In the present qualitative research, when people in energy poverty report their everyday practices (section 3), they appear as actors, facing their restrictive environment with usual strategic competences. In this case, most of practices are based on self-restriction ranging from heating curtailment and reducing space to be heated, to applying severe self-restriction related to food and health according to prior values of prioritising the quality of life of children before the well-being of their parents. This restrictive way of living often affects the acquisition of necessary furniture or appliances. It may even lead to hindering regular participation in social life, for example being unable to ensure a sufficient body hygiene for their children to go to school because of lack of hot water, for instance. People also apply usual pragmatic solutions to prevent a lack of heating conditions and related difficulties: they caulk doors and windows; they use kerosene lamps for heating; they wear extra clothes or use extra blankets when it is cold at home or they walk to public and shopping spaces to get warm. Acting this way, people get used to applying skills specifically developed in energy-poor living conditions and corresponding to some kind of standard role as actors in a context defined by energy poverty.

Finally, the qualitative analysis of the in-depth interviews shows that people living in energy poverty use coping practices (section 4). These refer to initiatives or innovative practices that people engage with to try to overcome their conditions with more sustainable solutions (even if these practices are even more considered as solutions for saving money more than 'saving the planet'). Most of the time these practices require people to question their competences and experiences to find new pathways with the help of others to face their problems. In these circumstances, people act as authors. This way of acting helps people living in energy poverty to develop knowledge and skills to reduce their energy bills or to find a way to negotiate a plan concerning arrears for energy bills. In these cases, people can find assistance in Public Centres for Social Action regarding their energy supplier, or in specialised organisations or in Social Housing Societies. Even the Internet offers an important resource for solutions. In a proactive way of living, energy-poor people implement energy saving advice such as using CFLs, washing the laundry when a cheaper tariff for electricity is available, or installing a day/night electric meter. In some cases, these practices are part of family education when parents teach their children about these energy saving behaviours. Interpersonal solidarity in the neighbourhood also helps individuals to face adversity under better conditions: people give and receive help for better well-being when it comes to food, clothes, or time for childcare. It can also be a collective help for retrofitting dwellings in a neighbourhood. These experiences of solidarity show how energy-poor households may develop new competences, skills, and knowledge to develop coping strategies and to prevent even worse conditions related to energy poverty.

In conclusion, this qualitative approach gives evidence that people living in poverty act mainly in an agentic posture. Most of the time, they adopt reactive behaviours constrained by external events that they can hardly control and which limit their lifeworld. Even when they act as actors, they mostly get used to adapting their practices not only to save energy but also to limit their everyday life and well-being. However, energy-poor households also adopt coping strategies. In this case, people living in energy poverty act as authors when they take initiatives, develop new strategies and knowledge, and engage solidary practices in the neighbourhood.

Among those living in energy poverty, gender and generation effects generally parallel these main conclusions and show how stereotypes work in discriminating against older generations and single-mother families. Even more than others, these categories are strongly affected by living in energy poverty.

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7. FOCUS: A PARTICIPATING OBSERVATION IN THE BRUSSELS REGION

Anne Baudaux

1. INTRODUCTION

During the 2GENDEERS project (Generation and Gender ENergy DEprivation: Realities and Social policies), field observations among social workers and beneficiaries of social welfare were conducted over 3 years in Brussels. This was in part to find professional intermediaries as gatekeepers to identify persons in energy poverty who could be interviewed. It also complemented the material gathered through interviews with people living in energy poverty (see previous Chapter), by including the perspectives of professionals on the topic. Several people experiencing energy poverty were met, sometimes briefly, but mainly in groups and none of these encounters resulted in an in-depth interview. Nevertheless, it offered valuable information about the 'help relationship' existing between social workers and beneficiaries.

"Energy poverty" is here understood as a situation where householders feel unable to access a comfortable level of domestic energy, and/or to invest a reasonable amount of money for it. At least this was it the opinion of social workers accompanying the households met; some people do not define themselves as "poor" or do not express having a problematic relation or access to energy even though they are living a critical situation. The following points give an inside view of the realities of both social workers and people going through aid application in a context of energy poverty. Therefore, this paper is also a contribution to knowledge on social policies from a field perspective and their meaning in everyday life.

The goal of this chapter is to shed light on some situations experienced by people struggling against energy poverty, whether their own or on behalf of others. First, a review of the different places investigated for this research will be given. The notion of having a home versus the idea of simply being an inhabitant will briefly be addressed as it came out as a major issue from the interviews, and as one cannot talk about "domestic" energy without clarifying what actually is a dwelling. The third section will define a few important notions to give a more theoretical perspective on "recognition", and how it can affect the social help relationship. Finally, in the particular context of the Brussels Region, the day-by-day relationship to administration, from the perspective of both professionals and "users", will be explored.

1.1 Context

The fieldwork was carried out in the Brussels Region, one of the three Belgian Regions. The Brussels Region includes 19 municipalities with a "Public Centre for Social Action" in each one. These centres provide financial help, social, medical, and administrative support that are either defined by federal laws or that result from municipal policies. Their aim is to help every citizen to live a decent life. Both the Region and the municipality fund the Public Centres for Social Action. The Council of Social Action has a political mandate from the municipality, and approves the budget and every decision regarding the Public Centre for Social Action. This means that every municipality has its own priorities and philosophy when it comes to the missions of a Public Centre for Social Action. One could regret the lack of coordination and homogeneity among the 19 municipalities, but it also allows creativity and the possibility to do case-by-case assessments (Baudaux 2014). This research also took place in a few non-profit organisations. Most of them are partly funded by the Region and/or the municipality where they are located.

For this project, contacts were made with 8 Public Centres for Social Action and 11 non-profit associations in the Brussels Region, altogether covering 13 municipalities. From March 2014 to April 2017, visits and informal interviews were made in "energy units" (a service provided by several Public Centres for Social Action and designed to help people dealing

with domestic energy problems) and non-profit associations in several municipalities. "Energy saving tips" workshops offered by non-profit associations or Public Centres for Social Action, training on energy for social workers, meetings with professionals and beneficiaries, debates organised by social workers and conferences on energy poverty were also attended.

1.2 Methodology

The method used was participant observation: attending various events organised by or for social workers, and taking notes to get "the experiential insights and intuitions that immersion in another social world can provide. (...) the field worker is concerned with 'getting into place' to observe interesting, significant events in order to produce a detailed written record of them" (Emerson et al. 1995:18). "Observers immerse themselves in the lives of the people and the situations they wish to understand. They speak with them, joke with them, empathize with them, and share their concerns and experiences. Prolonged contact in the setting allows them to view the dynamics of conflict and change and thus see organizations, relationships, and group and individual definitions in process" (Bogdan & Taylor 1975: 5). Due to the research topic and limited access to the field, the most active participation (as opposed to more passive observation) was limited to attending meetings of the Vigilance Network (each month, this social workers' network gathers around 40 people in Brussels around the subject of energy). Volunteering to a social economy enterprise for several weeks was also done in hopes of finding more people to interview, with no great success as this work left very little time to chat; in addition, energy poverty is a sensitive topic. However all these actions and meetings allowed the researcher to get a sense of how the procedures described by the interviewees are practiced, to experience the confusion that energy matters can bring about, to see how social workers proceed to sensitize people to energy savings, etc. The reason for the researcher's presence at all of these activities, namely research on energy poverty, was never hidden. Each encounter with a social work professional resulted in a specific co-constructed methodology: the decision of how to proceed was never taken by the researcher alone but, depending on the professional's wishes, those professionals were more or less involved.

Eight professionals let the researcher accompany them during their appointments, office hours, workshops, or even home visits. Those social workers (from 4 Public Centres for Social Action and 4 non-profit associations) were particularly generous with their time and helped considerably to get new in-depth interviews (discussed in the previous section) and to understand their job. Others suggested to the researcher that she stays in a waiting room in order to introduce herself to beneficiaries but there the researcher was confronted with a rather hostile climate, as most people waiting are either angry, stressed, ashamed, or frustrated, sometimes implicitly raising the question of "what will I gain from your study?". Some interesting notes were nevertheless collected during those short informal discussions. A few social workers, mostly in Public Centres for Social Action, received the researcher once, explained how they are doing their job and how they conceive their roles as social workers, but it did not go further (so maximum 2 appointments, but resulting in no contacts for interviewees in energy poverty, nor further suggestions). However, these discussions with social workers were informative about the relationship, not straightforward, between social work and academic research.

It appears that implications are very different depending on whether the social worker has the opportunity to see the beneficiary and her/his situation in its entirety and to be involved in a longer-term relationship, or not. If, as illustrated in the previous section by some interview quotes from beneficiaries, the social worker will only see the person two times a year and/or only have the opportunity to try to figure out how to solve an immediate problem, probably with financial means, can one really talk about a relationship? It also appears that social workers who had a closer relationship with beneficiaries were more open to being involved in research.

The term “fieldnotes” refers to the notebook in which the researcher gathered personal impressions and observations, descriptions, conference and meeting notes as well as informal exchanges with designated beneficiaries of social services, social workers or other specialists related to the matter of energy poverty (such as architects or lawyers). Extracts of the notebook and main ideas developed by induction about the meaning of energy poverty in everyday life were complemented by theoretical input that helped in analysing the material. Material is said to be saturated when new observations do not bring about new information (Olivier de Sardan 1995). These results were then interpreted based on the main ideas tackled by the actors met during the research, along with scientific literature and personal observations of the researcher. What emerged was the dwelling as a central notion and the difference between having a roof over one's head and feeling “home”; the role of recognition when it comes to giving emotional and/or material support to someone living in energy poverty; and the fatigue and constraints generated by the bureaucracy. Data was compared and sorted in order to bring out concepts that can capture the most recurrent notions and render them into “generalized statements about whole classes of phenomena rather than specific statements of fact, statements that apply to people and organizations everywhere rather than just to these people here and now, or there and then.” (Becker 1998: 109). In this way, depth is afforded by placing the listing of facts into a more general context: the context of a society.

In order to preserve anonymity, details about where information or specific words were heard will stay vague. All following quotes and fieldnotes are personal translations from French.

2. MAIN RESULTS

The following sections highlight what seem to be the more significant findings regarding the social help relationship, and which are the most complementary with regard to the section of the report on people living in energy poverty. The interviews with people living in energy poverty in Brussels have also been drawn on to some extent, as the two components of the research, the participant observation and the interviews, were linked.

2.1 Energy guidance: Brussels landscape

This section does not claim to exhaustively represent the huge variety of services available in the Brussels Region related to domestic energy access: indeed, in every municipality, there is an energy unit that is sometimes integrated with a debt mediation service, and energy savings activities can be organised in every neighbourhood association. The following paragraphs describe insights from the field research.

First, social workers' use of the term “user” requires an explanation and a discussion. It is the word heard more often than not from social workers to name “those making use of social services” (Hubert et al. 2015: 3). It is also massively used in the literature, sometimes with an argumentation (Hubert et al. 2015) sometimes without (Caron & Durand-Daubin 2015). Being a user of a social service is like being a client, except that the “user” does not pay for the service received. The term to some seems harsh, as the role of the social worker is supposed to be a “social” mission, a qualitative job based on a relationship between two human beings of whom one is experiencing a tough situation. It certainly sounds more like a commercial transaction than a social vocation, which is accentuated by the use of numbers or tickets in some centres' waiting rooms like at butcheries or post offices. On the other hand, it might also be seen as a less stigmatising word than “beneficiary” for example, “user” being more neutral in a sense, like the users of public transport. The term is used here as it is the vocabulary mainly used by the field actors encountered. It immediately questions the famous Marcel Mauss trio, giving-receiving-reciprocating: how to reciprocate when you are a beneficiary of social welfare? Charity is indeed something that is hard to accept and that can generate discomfort and shame.

The social sphere “is dominated by the principle of gift and debt” and is divided between “personal relationships and the realm of associations, where gifts between strangers dominates.” (Godbout 2013:11). Going to a Public Centre for Social Action, where the “gift between strangers” happens, can be a very complicated step, as the interview analysis in the qualitative interviews chapter already demonstrated. Moreover, asking for help is just the beginning; one then has to accept it. People’s resistance in the face of some advice to save money can sometimes be surprising, and may represent something between mistrust and pride. Take for example this woman living with very small income after her husband’s bankruptcy and her inability to go back to work due to a very serious medical condition. During an appointment in an energy unit, her energy advisor suggested that she changed energy supplier. She was afraid of extra costs of doing so and the advisor reassured her by testifying of his own experience as a customer. She also wondered if it was worth asking for a social tariff as she was planning to go back to work in 2 months, as if she had the feeling of taking advantage of a social measure not really meant for the likes of her (Fieldnotes, 03.07.2014). Anthropologist J. Godbout describes the “material incapacity to reciprocate” as very difficult and a vector of guilt. He even qualifies the will of the giver to prevent someone from giving back as “perverse” (Godbout 2013:154). However, by definition, a user from a state service cannot give back. Or at least is it not intended, especially in big Public Centres for Social Action with a huge number of requests that do not allow social workers to develop a long-term relationship with users.

Non-profit associations, on the other hand, are places where one can give back or, at least, where gifts can circulate without making anyone uncomfortable: indeed a woman, involved in workshops organised by a non-profit in her neighbourhood, testified during the last session: “[your association] did not only help us, but also our families and friends”. Indeed, she feels that she is now able, and willing, to advise her relatives of what she learned (about CO₂, dampness, rights of the renter...). The same person talked about “no longer being alone with your problems” (Fieldnotes, 19.01.2016); this is another difference that seems to exist between the approach of Public Centres for Social Action and non-profit associations. Many associations seem to encourage group constitution, group activities etc. On the contrary, the institutionalised social help supposes a very individual approach: a one-to-one contact with the social worker, one personal file, one personal debt, one person having to justify why he or she cannot afford for domestic energy this month, one “user” who must make efforts. Is it an individual issue? Yes, partly so, but it also questions the housing market, and possibly the labour market. Furthermore, it also involves health, family, and education, one’s capacity to face a life accident, to understand bills, to manage a tight budget, or to afford for a better-insulated house. It is a social issue. Though social services have the tendency to tell the user that s/he is responsible, that s/he should do something, prove s/he is of good faith (Caron & Durand-Daubin 2015), and that s/he is going to “activate²⁰” (Méhauden et al. 2015) himself or herself. Authors like Caron and Durand-Daubin indeed showed the weight of the social workers good or bad impression as well as the influence of their subjectivity in the help process in France, which offers similarities with the Belgian situation (Caron & Durand-Daubin 2015).

In the waiting room of a Public Centre for Social Action, a woman talked with the researcher about how frustrating it was for her to apply constantly for jobs, never getting a positive answer and that, additionally, it seemed never enough for her advisor, who apparently treated her as if she was doing nothing (Fieldnotes, 23.04.2015). In the same vein, a man met during this study said, “When having no degree one is taken for being less than nothing (...) and with the [necessity of being] competitive everybody wants you to be a professional immediately.” He was “losing ground” after many unsuccessful administrative procedures to get a job and a roof (Fieldnotes, 18.04.2016).

²⁰ Generally meaning “engage”; we use “activate” as a literal translation of the French concept at the center of the discussed employment policies.

Bringing the child to autonomy is generally thought as being primarily the mission of the parents; telling a grown-up that s/he is doing it all wrong with her or his budget management and that s/he has to get autonomy can be experienced as an infantilisation. The general situation of a person asking for social welfare could give the impression that s/he is not in control of his or her life, but one can question whether guilt and shame are an effective way to help someone to go back on his or her feet. Psychiatrist J. Furtos talks about good and bad precariousness: knowing you need others to survive is the proper situation of human beings and actually positive, as long as there is a possibility of reciprocity. Hyperindividualisation results in bad precariousness by developing a lack of self-confidence and distrust in others (Furtos 2009a). Those feelings can explain why so many people drag their feet in coming to energy saving workshops (often called “animations sur l'utilisation rationnelle de l'énergie” in French) organised by Public Centres for Social Action. Dr Furtos adds to that list of effects that the constant fear of losing the little that somebody has annihilates the possibility of being creative, which is essential when one has to rebuild a life after a death, or a career after a bankruptcy, for example. This can help understand why many people are stagnating in a situation of being beneficiaries of social help.

Below is a notebook quote describing one of these workshops and the pressure to be a “deserving” beneficiary:

F. is an energy adviser. I am allowed to attend one of her workshops about “rational use of energy” in her Public Centre for Social Action. She explains to me that the people here are willing to come: they received invitations because they are on an over-consumption rate. “Electricity is not a matter of building”, she says to me. She adds that after such a presentation most of the “users” present are going to reduce their energy bill of minimum 20%. During the workshop, F., looking much stricter than when it was just the two of us, talks about energy-saving bulbs, A+ appliances, multi-socket with switch-off, how to take care of a fridge, to avoid using one micro-wave too much, etc. “I am explaining you how to have an economical behaviour, but it is then up to you. (...) To save money, you have to calculate”. She adds that social workers regularly write reports and that “one should not ask for help if making no effort” (Fieldnotes, 27.03.2014).

There is an ambiguity about the optional aspect of those workshops, as beneficiaries of social help want their social worker to be in favour of them. Sometimes they are also confused about what they should do or not do, what can be seen as bad or good behaviour, and what is going to be said in their personal file. Beneficiaries are of course not in a position to look like they have a lack of good will. In fact, a social worker openly told during a workshop that “people who are making efforts are supported by the council [of social action of the municipality]” (F., fieldnotes, 27.03.2014). The asymmetry of the relation is also shown in other ways: energy guidance councillors, as well as policy makers and reports on energy poverty, are often talking about the “rational use” of energy. On the other hand, many social workers say that most “energy poor” are in fact self-rationing, already paying attention to their use of energy. Knowing this, one can understand why workshops on energy saving tips are not that popular: the tone is often very school-like, many of the participants already know about those tips and they probably have many other, bigger issues (such as a debt solving, health condition or access to food), called “immediate needs” by Grevisse & Hubert (2015: 8). In addition, attendance at such workshops is mandatory in some Public Centres for Social Action, and it is a very passive approach as the beneficiaries are only there to listen. But what is expected is actually a very proactive reaction: as sociologist Franssen (2003) explained, the transition from a welfare state to active social policies²¹ in Belgium resulted in an individualisation of the problems and then, of the answers. The beneficiary of social help has to make it on his own, has to be flexible, proactive, and should only blame himself for the situation s/he is experiencing (Franssen 2003). This (not so) new “active social policies” perspective changes a lot regarding one's feeling of guilt, self-image, capacity to adopt a

²¹ A “social active state”, literally.

positive attitude, or to trust the future. It can also lead to acceptance of any kind of job, even unpaid, to show one's good will (Méhauden et al. 2015).

However, exchanges of experiences were also observed among the participants of the Public Centres for Social Action's workshops previously described: one complained about a water leak and the owner doing nothing about it. And then another testified to a similar situation where the owner finally resolved everything as the tenant had blocked the rent. That kind of simple encouragement and exchange of experiences between peers gives hope. The sense of having emotional support for these actions should not be underestimated: the idea of "not being alone in front of one's problems" often came out during the research. And the state of mind is an important factor to assist in the recovery from hard times and to get the best out of someone or of a situation: as psychiatrist D. Schurmans (2010) explained, it is better for the person wanting to encourage a healing process to accompany the movement rather than trying to force a way, or wanting to push a little too much in a specific direction because "it is how it is supposed to be done". It can probably apply to the will to help in general: to accompany²² seemed much more efficient and respectful, even if it takes more time. Grevisse and Hubert (2015: 10) argue in favour of "energy accompaniment" where availability and tenaciousness of social workers are as important as expertise itself.

As an example of a respectful and long-term approach, in another association, they try to promote an ecological as well as an economical aspect in their energy saving workshops. They do not stress the first one "out of decency", because they do not want the participants to feel guilty about the environment as they already have enough problems to deal with in their everyday life. However, one of the professionals met in this association told the researcher that some people are leaving the workshops in anger because they do not receive real solutions directly applicable, or at least not the one they wanted, but only advices, "little gestures" to save energy, how to read an energy bill, etc. "It looks like [the bill is written] so it cannot be understood, on purpose" she added. "There is no transparency; people are dispossessed of their means of action" (fieldnotes, professional, 17.09.2015).

Several associations have a global approach with their public, which fits the idea that setting up the conditions of a real relationship is more beneficial than an occasional assistance, which supposes a longer-term effort but also offers a way for the beneficiary to gain autonomy. An unpaid energy bill, for example, is often mentioned as a way to open a door that allows social workers to go deeper with the beneficiary by getting access to the house and/or other problems. As said by an architect: while helping people to get grants for their renovation works, work estimation can be a pretext to see the dwelling situation and to give broader advice (fieldnotes, 17.09.2015). Many associations are providing French courses in the same spirit: it is a beginning. One of the neighbourhood associations encountered is going further by proposing to the participants of their workshops on dwelling and energy to share what they learned through an exhibit, or a small press article. Simultaneously to their didactic activities, they organised lunches where everyone brings something home-cooked to share with others, in the same spirit of creating a community rather than solving one of the numerous problems of an anonymous person out of his or her context.

It is obvious that most Public Centres for Social Action do not have either financial or human means to develop these kinds of long-term relationships and to diversify their approaches as some associations do: with an average of twenty minutes in big centres for each case, it is impossible to have an overall overview of a person's situation. It is more about helping as many people as possible, following a strict legal framework (Serre & Vleminckx 2015). However, partnerships between associations and public services exist, and the "Vigilance Network" is a good example of the will to exchange experiences among social workers, and

²² The notion of accompaniment is here used in the meaning of "going with", not so much for "guiding" or "protecting" than to encourage and, if necessary, to complement the action. So it is the idea of offering support, material or emotional, without being necessarily the source of the intended action.

getting inspired by one another. Their meetings seem to have, in a certain way, the same function as those workshops of some associations already described, trying to make their beneficiaries participate in an integrative approach. It allows social workers (from associations as well as from Public Centres for Social Action) to no longer feel alone facing the complexity of the law, technical regulations, increasing number of people pushing their doors, etc.

“After 10 years of energy market liberalisation one can notice that, for a large number of [non-professionals], the rules and the functioning of the liberalised market are not assimilated” (The Vigilance Network, minutes of the 20th September 2016’s meeting).

Another recurrent idea shared by many authors and professionals is that quite a lot of the means developed to help the “energy poor” often do not benefit the ones needing it the most because those people do not succeed in completing the procedures or did not hear about them. As to the question of what to do to reach more people, especially those who are the most likely to have energy access problems, a social worker answered that he was not looking to have more beneficiaries because they “already have too many requests” (Fieldnotes, 5.11.2015.) That reflection could seem brutal, or at least incongruous, but it meets a reality principle: getting to help more people involves having the (human and/or financial) means to do so. Regarding means, it should also be noted that they are quite different from one municipality to another: “energy advisers” (sometimes called “energy tutors”) can have very different backgrounds (environment advisers, urbanism specialists or social workers with no particular training regarding energy) — but give similar services. This is not only a question of subsidies and of the size of the municipality: each Public Centre for Social Action and each association can have different choices, visions, and a different team composition.

2.2 The concept of dwelling

“All men have stars, but they are not the same things for different people. For some, who are travellers, the stars are guides. For others they are no more than little lights in the sky. For others, who are scholars, they are problems... But all these stars are silent. You - You alone will have stars as no one else has them... In one of the stars I shall be living. In one of them I shall be laughing. And so it will be as if all the stars will be laughing when you look at the sky at night...” Antoine de Saint-Exupéry, *The Little Prince*

In French the relation between a home and energy immediately comes to sense with the term “foyer”: it means “home”, but also “family” and “fireplace”. How to tackle domestic energy poverty without understanding that it is indeed a “domestic” problem, involving the home? What does “home” mean? To psychiatrist Jean Furtos, what is interesting is to focus on “the difference between having a dwelling, having a shelter, rich or poor, and having a home” (Furtos 2013: 1). The nuance is important: a home, where it is supposed to be “sweet” to stay, is not only four walls and a roof. Furtos also wrote: “Man inhabits, and this is how he takes a place among humans. For that, he needs a place to anchor his body, his subjectivity, his story, his citizenship. To inhabit means to put a part of yourself in a place, which is much different from being housed. If he cannot inhabit, a man cannot have a place and this is what we today call exclusion. Helping someone to inhabit is called struggling against exclusion.” (Furtos 2009a: 1) In their thoughts about a “shared language about inhabited space”, P. Averlant and R. Sabatier wrote that to inhabit somewhere “is a constitutive act; it structures one’s own space and the space of others”. “To transform an inhabited space, it is to inscribe oneself into history, to combine one’s own story with others’: the inhabitants, the collectivity, the country”. It is to anchor the whole family within time and space (Averlant & Sabatier 2008: 29).

If we look at Lucie’s story: her house is unhealthy and she cannot afford renovation work. From the point of view of her social worker, the rational thing to do would be to sell the

house before it collapses and hurts somebody. But for her, it represents so many things (memories, sacrifices, her only possession left ...) that the arithmetic here is terribly difficult to do. And the injunction to sell is perceived as very violent. This story also shows that there can be a certain gap between two notions of dwelling. Roughly speaking, Lucie is saying: "this is my home (there is no other place like it on earth)" and the social worker advising her to sell is obviously referring to another definition, like if it is only a matter of papers and estate agency. We all have our own inner "rationality", which philosopher A. Deneault calls "economical rationality" but in a broad sense (it does not only involve economical values but one's resources in general): the goal is to conserve what is limited, to keep a certain balance. So one has to wonder: what is there to lose, and what is there to gain? In Lucie's example, the most rational thought might not be to give up on her dear house.

Pride is something one does not want to lose. Hoggart, in his book *The Uses of Literacy*, talks about pride as "the integrity of those who have practically nothing except a determination not to allow themselves to be dragged down by circumstances. At the centre is a resolution to hold on to that of which one can be rightly proud; in a world which puts so many stumbling-blocks in the way, to hold on at least to 'self-respect'" (Hoggart 1957: 66-67). This can explain why some choices and "reasonable behaviour" are not so easy to accept or adopt even if one's (financial) situation is critical... it is actually difficult enough living with so little latitude due to a lack of money. Therefore, it can be more important than ever to resist, to value one free will.

Lucie's representation of her home is echoed by Architect Nadège Leroux describing the notion of "home" as a "direct expression of existence", an "integral part of the identity" that constitutes an "essential step towards the stabilisation" and recognition of oneself (Leroux 2008: 19). As for him, the pedagogue Jacques Ladsous defines "to inhabit" as the ability "to take a place for one's own". He explains that it is a personal notion, and that it means more than just having a dwelling, a place to stay. It can take place anywhere, as long as it allows protecting one's intimacy (Ladsous 2008: 9). Averlant and Sabatier insist that it is a symbolic as well as a material reality (Averlant & Sabatier 2008: 29). This is in line with the recognition concept (see following section) and suggests that a broader definition of a dwelling should be taken into account in energy policies and social help measures (to avoid an overly pragmatic, cold or solely material solution that could be totally rejected or not be well understood by a person living in energy poverty, for example). Indeed a home, as demonstrated above, is a subjective and sensitive matter; if one feels there is no room for the emotional aspect of his or her dwelling how can s/he embrace the solution proposed to help him or her fighting domestic energy issues? The previous sections aimed to show that a proactive approach, truly involving the beneficiary/person experiencing difficulties, was more effective and thoughtful. So, recognising the person who was helped, and therefore her or his comprehension of what a home means, seems crucial.

Some places visited as part of this research certainly question the notion of "protecting intimacy", like one apartment, probably illegal, which was in fact a living room for a woman and her little girl. At night, they put mattresses on the floor to sleep. The microwave was under the sole table. The kitchen corner was anything but "equipped" and they had to share a common bathroom (actually a camping-style shower) with neighbours in the corridor for 455€/month, all expenses included. They probably did not have papers, or maybe the mother took the first apartment she could, knowing nothing and no one in Brussels, but being afraid (like so many other people) of ending up in the streets with her daughter. As Maresca and Lacombe wrote, people are often trapped in bad dwellings because "the next step is the street, and with it comes real exclusion" (Maresca & Lacombe 2015: 54). Slumlords are a well-known phenomenon but professionals have to be careful not to create problems between tenant and owner, even unscrupulous owners. That is why professionals try to mediate in order to get a private arrangement, but "when owners do not want to do anything for their tenants we cannot force them" (Environment adviser, fieldnotes, 27.03.2014.) Of course, landlords are not all dishonest but as an architect working for a non-

profit organisation told the researcher “I think owners find it hard to believe that if they insulate for their tenants it would be way better” (Fieldnotes, 17.09.2015). Even the dwelling society of the Brussels Region is very careful before declaring a dwelling substandard, because most of the time they do not have a solution to relocate the inhabitants.

Dwellings are also very significant for social workers too as they are often the starting point of the help relationship: “we begin with the dwelling to fix the rest” declared a social worker during a workshop (Fieldnotes, 01.12.2016). Indeed, as seen in the previous section, having a precarious home is generally seen as a problem to solve prior and a gateway to access other aspects of the person's life, an opportunity to solve other problems less obvious.

Having access to domestic energy is certainly part of having a decent dwelling. But having access to a dwelling may already be a problem: in the Brussels Region 38.4% of people were at “risk of poverty or social exclusion” in 2014 (SILC 2015). There were 45 742 households on a waiting list for a social dwelling on December 2015 (Social Barometer 2016: 50) and almost 90% of the dwellings for rent are not accessible for the lowest six income deciles, if not spending more than 25% of the household income (De Keersmaecker 2014: 110). As the previous chapters have shown, the dwelling is a key factor in energy poverty in many cases, as well as the household budget, which is partly swept away by rent (often too expensive according to our interviewees and those numbers). It could then be useful for further policies to better link the struggle for a decent dwelling with the right to have access to energy services.

2.3 Recognition and non-use of social services

How do we explain why so many people qualifying for financial help from the state, or living in a difficult situation that could be significantly improved with the support of one of the numerous Brussels associations, are not asking for it? The Social Services Federation (FdSS), which comprises about 30 partly subsidised services, has highlighted the difficulty of getting in touch with some of the most vulnerable people. Both interviews and field research conducted for this project have shown that many people do not seem to be aware of the possibilities available for social help and energy guidance. We have already mentioned the role of pride. Another part of the explanation can be found by exploring the notion of recognition.

The philosopher N. Fraser explains how recognition is necessary in the identity process from a Hegelian perspective: “According to Hegel, recognition designates an ideal reciprocal relation between subjects, in which each sees the other both as its equal and also as separate from it. This relation is constitutive for subjectivity: one becomes an individual subject only by virtue of recognizing, and being recognized by, another subject. Recognition from others is thus essential to the development of a sense of self. To be denied recognition – or to be ‘misrecognized’ – is to suffer both a distortion of one’s relation to one’s self and an injury to one’s identity.” (Fraser 2000: 109)

The waiting room of many social services introduces and raises the question of the notion of recognition – not all waiting rooms but those where, like for the hearings between suppliers' lawyers and customers in debt, one has to wait in silence for one's turn, for an indeterminate period of time. This configuration is a pragmatic one, sometimes even a question of security. But when one has to wait for hours and no-one is talking to him or her, it sort of says that no one cares for that person's time. In some structures, there are nice and considerate welcoming staff and, of course, during opening hours it is difficult to predict the end of an appointment. Nevertheless, some things could be set up like a numbers system with a time indication (“after number x at least one hour wait”, for example) as suggests by psychiatrist C. Burquel (2017). This way one is not just a person waiting but can organise his or her day like anyone else, without the sense that his or her time matters less because of being a user of a social service. It would be both less stigmatising and less discouraging.

Many service users met during the study were clearly suffering from lack of recognition regarding the hard times they were going through (after a divorce, bankrupt, ill health, or such) and expressed their impression of being seen as persons taking advantage of the system. According to N. Fraser, “to belong to a group that is devalued by the dominant culture is to be misrecognized, to suffer a distortion in one’s relation to one’s self. As a result of repeated encounters with the stigmatizing gaze of a culturally dominant other, the members of disesteemed groups internalize negative self-images” (Fraser 2000: 109). The Western “dominant culture” nowadays certainly supposes, among other things, the possibility to heat all rooms at a comfortable temperature and using many electronic devices at home without fearing the energy bill. We saw this kind of suffering and frustration described by Fraser within the speech of several “energy poor” receiving financial help but trying to set themselves apart from other beneficiaries. It has also been pointed out by Serre and Vleminckx (2015a) who described the relationship between a social worker and some users; how representations (of both social workers and “users”) affect the help request; and the fact that some social workers feel they are seen as (and/or somehow forced to be) psychologists.

Having the possibility of getting financial help supposes not only living in a difficult (material, physical and/or psychological) situation, but also a translation into a statute (to get access to a preferential tariff for energy or to a medical treatment for example). But, as the authors of *“Energy Poverty in Belgium”* say, “It seems clear that it is not because someone is objectively in a situation that provides eligibility to benefit from aid that this situation is recognised and considered from a legal standpoint” (Huybrechs et al. 2011: 24). Grevisse and Hubert (2015) explicitly wrote that one of the *energy guide’s* main roles is to translate the user’s request to something more assertive, concrete, and understandable. They are compared to ambassadors or diplomats, people who have “more credit” than the “users” and who have better chances to succeed where the “user” did not, even if s/he was within his or her rights (Grevisse & Hubert 2015: 13-16).

Though it is a relief for many people to be recognised through a statute that gives access to a certain number of rights, being a beneficiary of social help, or having difficulties to pay one’s bills or living in a non-healthy house, is not something to be proud of. It is more socially defined as a problem to tackle. It can be experienced as a broken promise, a deep injustice, explain French researchers Maresca and Lacombe: it is like going back in time, being excluded from “the train of modernity, which is supposed to take each generation further than the previous one” (Maresca & Lacombe 2015: 54). Indeed, not being able to afford domestic energy supposes that access to other goods may also be restricted, which somehow excludes one from society as, according to sociologist B. Heilbrunn, consumption contributes to give “sense, coherency and emotion to someone’s personal and social existence” (Heilbrunn 2005:8). Furthermore, all of us have to face a certain pressure to buy, to buy more and to buy new (Huybrechs et al. 2011: 22). Philosopher F. Burbage adds that we “link the improvement of our [life] conditions to the growth of a buying power that allows us to participate, as far as possible, in (...) high consumption.” (Burbage 2010). Suffering from energy deprivation at home, or finding it hard to make ends meet to avoid such a situation, slowly excludes one from the “consumer society”, and eventually from society itself.

Therefore, it is easier to understand why “energy poor” do not want to be associated with the “poor” label, which leads to the problem of “non-use” in terms of rights, access to certain services etc. dedicated to persons with very low means linked to a specific statute. Statutes can be difficult to claim sometimes, as shown by the statistics about “non-use” (of the right to pay less for domestic energy, for example). Moreover, having access to certain professional services designed to help people experiencing energy vulnerability and financial issues supposes being transparent about one’s expenses, to claim one’s rights for minimum income or to have a credit: “green loans are really intrusive, it is a 0% loan but [the bank] analyses every expense”, according to a municipality employee. This is why, for example, many

people prefer to ask their relatives for financial help (Fieldnotes, 01.04.2016). It also means being exposed to judgment: are you sure this was a priority? Are you sure you can afford this? The idea that many questions asked by social workers in order to check the rights for social allowances seemed intrusive often came up during the enquiries. For example a lawyer told the researcher after a hearing on energy debt mediation: “sometimes it is hard for me to believe that someone cannot fulfil a payment plan to solve his or her debt with a supplier when I saw him or her with a brand new last generation smartphone” (Fieldnotes, 13.06.2016). This kind of sentence shows the strength of prejudice and representations (about vulnerable people having “bad priorities”, for example).

However, people in energy poverty and ‘users’ in general are not the only ones to suffer from prejudices and lack of recognition. Some social workers feel that they are applying a Band-Aid on a wooden leg in the absence of stronger political action, sometimes with regret, or even with anger:

“The audience has changed: we not only receive beneficiaries of social welfare now, but also people having problems with suppliers even if they are not in structural poverty. That situation calls for a political answer! Sometimes it looks like all we can do is patch up locally: we take charge of the bill with the energy fund, or we help the user changing supplier or subscription.” (Social worker in an energy unit, fieldnotes, 11.03.2014.)

“Sometimes I have the impression we are used as cover plates.” (Social worker, fieldnotes, 01.12.2016.)

Paying bills can’t be the idea that most young social workers had of their mission, and it is certainly not the most gratifying part of the job. At the beginning of the research, a social worker told the researcher:

“One day a retired couple came to ask for financial help in our Public Centre for Social Action because their standard of living had substantially decreased with a pension as their only income. Actually, they were earning the same as I am with a salary... it did kind of hurt my feelings.” (Social worker in an energy unit, fieldnotes, 03.07.2014.)

The job of social worker itself can be precarious: the financial recognition is not high as well as the social recognition from part of society (for instance the common judgement on “functionaries”). Sometimes this feeling even comes from the inside, like a social worker from a Public Centre for Social Action telling that: *“our new colleagues, they are more bureaucratic, us we are more on the social side.”* (Social worker, fieldnotes, 01.12.2016). But part of the work seemed to be devalued just because it does not represent big numbers:

“We are not allowed to do “energy accompaniment” anymore because last year we “only” followed-up 300 people (...) 13 jobs were about to disappear! Fortunately, [my colleagues] fought back (...) they had to make a reconversion, to learn by themselves. Policy makers should come down to earth!” (Social worker, fieldnotes, 01.12.2016.)

During a workshop among social workers on the subject of precariousness and mental health, several social workers were talking about violence they often experienced from both beneficiaries and their institution. A woman giving French lessons for migrants in a non-profit association deplored the fact that Public Centres for Social Action ask them if their users really attend the course [as part of an integration programme], if they are making any progress etc. *“It is not a question of bad faith; it takes time to learn a new language, especially French, and a secure environment.”* A social nurse answered that the *“social workers in Public Centres for Social Action do not choose their way of working.”* *“We have about 25 minutes to understand [a case]”,* says a social worker, *“it’s a thankless job. We make propositions but the council for social action decides, not us”.* Another adds that *“there is a contradiction: social work has to be quantified, quick, yet it takes time to build a relationship.”* (Fieldnotes, 01.12.2016.)

According to researchers from the Social Services Federation, this “*role of a control agent*” is more associated with social workers in Public Centres for Social Action than it is in other structures. Some are “*constantly evaluating the validity of the person’s file (...) the user has to show that s/he is cooperative otherwise s/he would risk a sanction, and s/he has to accept being controlled by [some of the] professionals.*” The “institutional framework” that social workers in Public Centres for Social Action belong to could partly explain the tendency for adopting that kind of controlling behaviour (Vleminckx & Serre 2015b: 6). Two energy advisors, both working in a non-profit partly funded by the municipality, told the researcher they have noticed that “internal procedures are getting more and more rigid. There is a strict hierarchy to observe” and that the bureaucracy is increasing. “*We saw the difference in 5 years!*” Actually, they were convinced it would take far more time to get the authorization for the researcher to meet them at their work place. (Fieldnotes, 21.06.2016.)

Social workers, at least in Public Centres for Social Action, are being forced to do more and more office work. Plus, they are dependent on the council for social action or a hierarchy to take a decision, or for a job attribution. They sometimes feel the disapprobation of other social workers because they have to check the attendance on their activities, which can compromise the trust relationship. They also have to deal with the users’ anguish, their own powerlessness in the face of some cases and sometimes they are even physically threatened: an energy advisor reported that angry and desperate users had beaten two of her colleagues up (Fieldnotes, 08.07.2014). So it is not surprising that many of them might thus lose the sense of their job!

2.4 When energy takes energy: the “file fatigue”

The complexity of the described procedures to maintain or improve energy access and several situations encountered during the study bring up a particular aspect of the energy deprivation issue that we have called here “file fatigue”. The story of a woman met in a courthouse corridor inspired the use of this term:

I am attending a public hearing in the Molenbeek Justice de Paix (local judiciary). I meet a woman accompanied by a juridical councillor [from one of the associations I know] in the corridor. She explains that she is the owner of a house that she does not live in and on a legal procedure for the last 8 years because several former renters left without paying their energy bills. Still she has kept at disposal all the proof showing that she is not the electricity company’s client, that she did not consume anything and that she is legally renting her house. She has several files in her hands. “I am becoming a manager”, she says. She looks exhausted. Later she will tell me that she is recovering from a cancer, which she links to her legal case and all the worries to try to defend herself. (Fieldnotes, 13.06.2016).

Thus, the use of the expression “file fatigue” is an attempt to translate the idea of “becoming a manager” of everyday life, when a common situation becomes too complicated for someone to deal with alone. It is the fact of being surrounded by documents to keep, others to fill, to copy, to show, to explain, to act on etc. “File fatigue” is also a reference to the complexity described by both social workers and beneficiaries going through an energy deprivation issue (Baudaux 2014). Complexity of the energy market, knowing one’s rights, understanding an energy bill, knowing which person to call, what to do in case of a door-to-door defrauding, an administrative error or a problem with a meter reading after a move are not easy to deal with, even for professionals. One cannot know everything about every aspect of social help or of the technical regulations of an energy supplier, whether being a judge or an energy councillor. But it also seems to be in the air, or should one say in our bureaucratic era, the “current situation where regulations (...) proliferate, or even “invade” our everyday lives (...).” (Hibou 2013: 9). In other words, it became normal not to be able to understand one’s rights and obligations by oneself. One could think that these procedures are deliberately complicated, and not about to be simplified as it results in jobs.

2.4.1 *Being a number? To put oneself in the place of a beneficiary*

Beneficiaries have sometimes the impression of being "just a number" (on a folder). During the field research, several Public Centres for Social Action were visited, and from the inside, one can understand that it is difficult to push the door of big ones — the kind of place where everybody seems to be an anonymous person — as the researcher herself felt uncomfortable when going to an appointment with a social worker:

I announce myself at the reception; a man looking numb and not exactly friendly is staring at his computer for what I found to be a very long time. I feel like I am invisible. He finally looks up and tells me he does not see my name in his register. I explain to him why I am here in a few words and he gives me a ticket that I have to show at another desk. When my turn comes, the other receptionist calls F. [the social worker I was supposed to meet] and she confirms our appointment. Someone comes for me (a pass is necessary to use the elevator) and he asks me to wait in the hall (...) F. comes and asks me why I did not come up directly. She says that the people at the reception probably thought I was a "user". I tell her my surprise about all the precautions (digital pass, several welcome rooms, stewards,...) and she explains to me that there have been several aggressions in the past, like for example an angry user coming with a knife. (Fieldnotes, 29.04.2014.)

Wanting to solve a tough situation by oneself is one of the reasons many people avoid going to social services, or, what seems more frequent, only go when there is no other choice— and then it is sometimes too late, or at least the situation has become a lot worse. *"Managing a budget is quite a job and no one teaches you that. When people are coming here it is often too late already"* (Director of an energy unit, fieldnotes, 5.11.2015). Like this man, many of the social workers met in Public Centres for Social Action seemed irritated about that, having the feeling of being there only to pay energy bills.

If asking for help is not easy, helping is not either: as researchers from the Social Services Federation showed (Vleminckx & Serre, 2015b), at least in Public Centres for Social Action, social workers have very little room to manoeuvre when it comes to being creative to help a user if they want to stay legal and to avoid problems in the hierarchy. Another difficulty occurs when potential beneficiaries are not asking for help, or are talking about their problems to the wrong service—sometimes purposely, sometimes not, or sometimes because that particular social worker is the only one whom the person requesting assistance managed to trust. So one can add to all these potential difficulties the precautions (such as not being too friendly or not giving a personal phone number) that social workers have to take to keep the relationship at a professional level (Vleminckx & Serre, 2015b).

Finally a few words about social worker turnover (see for example Vleminckx & Serre 2015b: 5): trust is even more complicated to maintain, and the feeling of being a number is stronger if the same person cannot monitor a case file from the beginning to its end. One of my interviewees was complaining about the fact that she had to rebuild her file for her new social worker as if nothing had been done before. And to go through the explanations about one's precarious situation all over again can be quite uncomfortable. The situation is no less frustrating from the other side as N., an energy advisor, told me:

N. explains to me she was working at the "urgent medical assistance" service with drug addicts, AIDS patients, and people without legal papers. She was then transferred [to the energy unit] because of budget restrictions. She is really upset about that as she liked her previous job a lot and is not really interested in energy matters. (Fieldnotes, 08.07.2014.)

2.4.2 *The need of translators or administration as a new language*

The importance of 'translation' was already mentioned: to get access to a certain statute and therefore to certain rights and/or financial help but also to be recognised as someone going through a tough situation. But, as shown below, in general, we are evolving into a society

saturated with information and with a veritable culture of complication. It seems that some key information such as which person to contact in which situation, which form to use, how to understand a juridical procedure, how to get a renovation grant or how to deal with one's landlord are not in the hands of "energy poor" and necessitates getting in touch with numerous people. This section is addressing that situation with a few examples from the field of investigation.

The first "translators" met were of course social workers themselves. At the beginning of this research, a woman expressed how her social worker helped her getting something because he explained well. The user had no particular problems to understand French but had no idea of what to do with the documents received from her energy supplier. That kind of situation tends to be very common. There were many notes on the wall with phone numbers in this social worker's office; he explained that they were exchanging tips among colleagues about which service to call in which situation, which person to ask for etc. Apparently, certain suppliers manage to find a solution only if a social service calls, for example. Or only if the social worker can manage to reach the right person: a common strategy is then to call as many times as necessary until another operator, maybe a more understanding one, picks up the phone.

Another woman explained during a workshop that she had no idea what her rights were and whether her dwelling situation was normal or not as she came from another country. She was very thankful to the association that accompanied her within her administrative procedures and helped her assert her right to a decent dwelling, but then the question is: what about all the people having no one to help them? What about the ones having also language problems and all the people who are not reached by social welfare? In the same spirit, the delegates of the Brussels' regulator for energy (Brugel) talked to the Vigilance Network (social workers assembly on the theme of energy - see section 2.1), during its April 2017 meeting, about an "administrative spiral" that creates a lot of confusion. Indeed, the time gap between the first reminder for paying an energy bill and the decision to cut off an electricity supply makes it complicated for the customer to understand what to do and when to react. Due to this uncertainty, the delegates argued, s/he will therefore not be prone to pay and may build up a larger debt. Still according to Brugel, people more "administratively educated" find ways to adapt (for example they change supplier) while others end up with huge bill and a bailiff (Fieldnotes, 18.04.2017).

A second example of the complexity surrounding energy matters: at the same meeting, the delegates of the Brussels regulator for energy gave some results of a small qualitative survey on the district judges (local justice department called Justice de Paix in French) they met to discuss about energy disconnection procedures. They concluded through informal discussions with several judges that "they do not understand anything about the Brussels' legislation on energy". Moreover, every judge apparently has on average about five minutes for each case. From field observations, it is quite disturbing to realise that they sometimes use a very specific vocabulary that, presumably, the large majority of people coming without a lawyer (which apparently is almost always the case) do not understand. Even if this does not necessarily prevent someone to understand the judgment, it is certainly intimidating.

The renovation grants are now briefly mentioned as a last example. These grants allow lower income people to start work in their house for better insulation, getting up to 100% of expenses reimbursed for new window frames. But, as two energy advisors said to the researcher, "it takes courage to go through the renovation incentive payment procedures!" (Fieldnotes, 21.06.2016). A woman employed in a municipality "grants office" explained that: "on average we intervene 15 times for each person", namely asking for assistance to complete the procedure, fill in the documents etc. It can go up to 40 actions and about 15 visits for just one demand. In this particular municipality (they do not all offer that kind of service), they are two employees for this. She also told the researcher that in case of a problem with the loan, employees of this office get an answer significantly more quickly than individuals. According to her, about 65% of the persons asking for advice to get a grant are

“low income” (that proportion was smaller until recently). She described the procedure required as laborious: choosing a contractor, getting cost estimates, the household language problem etc. “*Some are discouraged after the first visit, just by hearing the procedure explanation*” (Fieldnotes, 01.04.2016). She added that even she finds the municipality website not very easy to browse. The beneficiaries were pleased with this service, but it begs the question of why no one can complete that kind of procedure by oneself? Why is it so complicated? Of course there must be control and conditions, but it might contribute to explaining why the target of that kind of bonus (lower income households) are in fact not the most likely to get them.

At the end of the interview, when I switched off my recorder, Rose told me she thinks the procedures to obtain a renovation incentive payment should be simplified, not only for the most precarious cases but for everyone. She wonders if it is intentionally complicated in order to discourage people from applying. She explains to me that some of her interlocutors, at the Region’s offices for example, were very difficult to reach and unpleasant. For that reason she almost gave up several times. (Fieldnotes, 21.06.2016.)

3. CONCLUSION

This section of findings aimed to discuss energy poverty with an everyday life approach through the voices of several stakeholders. Participant observation was used to open a small window on what is it like to try to help people dealing with domestic energy problems as a profession, and to highlight a few mechanisms of that particular “assistance” relationship.

The first point discussed was the difficulty resulting from a donation-based relationship and therefore, the possible frustration for both sides. Social workers are presented with situations where it is almost too late, when financial intervention is the only thing left to do, while the beneficiaries of social help have to attend workshops and show good will and compliance if they want to benefit from the structure. The beneficiary’s feeling of guilt, shame and the discomfort of being put in a passive place make the help process more complicated or even unsuccessful.

There is a large variety of services available in the Brussels Region, some very complementary but not always in touch with each other. First line intervention, which is the main task of Public Centres for Social Action, can be enough to solve an immediate problem (for example with a supplier) or a temporary financial distress. But most professionals working for institutionalised assistance do not have the opportunity to go further with their “users” who are presenting the most urgent issues they have to deal with. Social workers from non-profit associations do not have much financial and personnel means but have fewer requests and thus the room to create a more person-centred approach. The combination of the two can be really powerful: Public Centres for Social Action are more well-known and can refer people to an association for a specific problem (how to save energy, how to mediate with a landlord, how to get a renovation grant...) as the association can spend more time with the beneficiary. Furthermore, people coming to an association for a very specific problem (for example to understand an energy bill or receive energy-saving bulb) could then be familiarised with social work and finally accept to push open a Public Centre for Social Action’s door (which is a very difficult step for some people as already discussed).

A reflection about what a dwelling means was then shared as it seems to be at the heart of domestic energy poverty, quite obviously, but more generally really significant in a social help process. Many studies about insulation, building energy efficiency etc. consider the dwelling above all like bricks, a number of walls and windows, a question of regulation and urbanistic criteria and so on. The point of this section was to show that a dwelling to its inhabitants is significantly more than just a roof, and that this is why it is so important to tackle energy poverty at home. It can also help with understanding why people living in such conditions often develop a strong feeling of injustice: because a dwelling is so intimate and

so vital at the same time, linked to the notion of family, security, emotions, roots, and (mental) health.

The third important notion addressed in this paper is the concept of recognition and how it can affect both the relationship between a person and his or her social worker, and the capacity to recover from hard times and move on. Non-take up of social rights and prerogatives seems to be a big concern in the social sector and the (lack of) recognition can shed more light on this. Social and political recognition of the job of social workers is not obvious either: many of them feel they are not (sufficiently) supported by political decisions (to help them holding out energy suppliers for example), neither by their salary, their work conditions, nor human means they have. They have to do more and more administrative work, and are supposed to establish a trustful relationship with their users while they have both less time to do so and a control role to play. This section argues that representation of the different stakeholders (on social help from beneficiaries, on oneself, on landlords, on beneficiaries from social workers...) has a big influence that should be taken into account in order to tackle energy poverty.

The last point is tightly linked to the “bureaucratisation” of society: administrations have a central role in social help, have their own language, codes and criteria. All of these imply lots of paper and documents, transforming a beneficiary into a file number. The help seeker has to fit into a category – otherwise s/he would not be recognised as someone suffering, someone needing and deserving financial help and/or another dwelling. A personal observation is that many people are unable to navigate through administration to address their problems in the right forms, though they theoretically fulfil the conditions required to get a social intervention. Therefore, they need a professional to translate things for them: an actual situation into a benefit, a need into an eligible request, or a law, a technical regulation, an architecture plan into a reality. This research shows that even professionals are lost in the amount of information, rules and changes that compose the energy guidance landscape.

Finally, this participant observation offers several contributions toward a better understanding of the preceding section on the qualitative interviews with “energy poor” persons. First, fieldwork showed that it is less stigmatizing to ask for the help of a neighbourhood’s association rather than the help of a Public Centre for Social Action. Many people actually need information as much as financial support, as the legislation is dense, complicated and changes regularly. But one has to feel comfortable in order to address one’s own personal issues. Furthermore, they allow neighbours to meet, mobilise solidarity and share skills between people living difficult situations. Secondly, most interviewees were living in badly insulated dwellings, sometimes even shacks. The other side of this situation is that social workers have very few solutions to offer: if someone cannot stay in their house, where could they go? As discussed previously, even the Dwelling Inspection does not tend to declare a place unhealthy if there is no solution to rehouse the occupants. Thirdly, fieldwork stressed that small gestures could significantly improve the feeling of recognition on the side of people using social services: avoiding situations where people have to wait endlessly to get to speak to a social worker, encouraging group activities around the subject of energy poverty, exchange of practices among energy poor, etc. And finally, the social workers’ voice corresponds to the interviewees’ experiences with administration and procedures: even the professionals find energy matters complicated and exchange tricks to override some problems with suppliers. Not understanding what one has to deal with is discouraging and often prevents vulnerable people to stand up for their rights or to keep on trying to get a renovation bonus or a legal statute. Each of these observations is a way forward that could help in tackling energy poverty.

8. POLICY RECOMMENDATIONS

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This chapter gives nine recommendations that can contribute to diminishing the prevalence of energy poverty. Other policy measures or actions could be useful as well, but a selection was made on two grounds. First, what are the most recurrent and urgent demands observed in the field? Second, with our respondents in mind, what would contribute to alleviate their harsh situations? The nine recommendations can be related to one of the following domains: energy policy (federal and regional competences), housing policy (mainly regional) or social integration (federal and municipal competences via Public Centres for Social Welfare/Action).²³

1. METHODOLOGICAL NOTE

The initial idea was to follow the “group analysis methodology” (Van Campenhout et al., 2005) to discuss and improve our recommendations. Due to the difficulty of gathering all members of the users’ committee even for only one day, we decided to ease the original methodology and choose a “small groups” configuration to exchange on the recommendations proposed by the three research teams. Each team had written three propositions and three groups were formed in order to have at each table: one researcher, male and female discussants, Flemish and French speakers, and the largest variety of sectors represented, with enough knowledge on public policies for each Region. Each group discussed the recommendations of the same research team, so the researcher at the origin of the propositions was at the table during the whole debate to answer any questions.

First, the nine recommendations had been sent to all committee members a few days in advance. On October 16th, 2017, the meeting started with presentation of the synthesis of results from the qualitative research that led to the recommendations. Then, each research team introduced its recommendations and the composition of the groups was announced. There were three to four committee members at each table. The idea was to let each person speak as freely as possible, having the occasion to exchange ideas, information and thoughts about the three recommendations with other stakeholders, and to do this in three groups simultaneously to save time and keep everyone’s attention until the end of the meeting. In each group, a rapporteur was designated to write a synthesis of all comments made about the recommendations and more specifically their relevance, feasibility, limits and possibly corrections or ideas for implementation. Discussions lasted about forty minutes, and then each rapporteur presented the results of the debates for his or her group to the whole audience. Twenty more minutes were devoted for the reactions of the whole audience, with any committee member free to comment on any of the nine recommendations. All discussions were recorded. The remarks were taken into account when reviewing the recommendations. Most of these corrections were realised until the end of the research project in early 2018.

2. ENERGY POLICY

2.1 Access to energy

As some interviewees have no access to energy at certain moments or periods because of a lack of financial resources, we recommend that a system of minimal gas delivery is set up or that the existing system is improved. However, this recommendation will not affect people heating with coal, firewood, wood pellets, or propane as these heating sources have much less social policy attention than gas, electricity, and heating oil. One reason for this is that it

²³ Centre Public d’Action Sociale (CPAS)/ Openbaar Centrum voor Maatschappelijk Welzijn (OCMW) in Belgium.

is easier to identify users of gas and electricity (and heating oil to a certain extent) than users of the more uncommon sources mentioned. In fact, this is a plea to set up a system for minimal *energy* supply regardless the heating system, but an improved minimal *gas* supply could be a useful first step. It should take into account income, heating system and household size.

2.1.1. Recommendation 1 on a minimal gas supply for everyone during the winter

1. To set up or improve a system of minimal gas supply

The system of minimal gas supply provides *financial support* during winter months to a target group of natural gas prepayment meter users. Currently, Public Centres for Social Welfare are not obliged to apply this mechanism. We recommend making this system mandatory throughout the country and broadening the types of people entitled to financial support.

Justification

In the Flemish and Walloon Regions, some minimal gas supply policies exist to provide financial support for partly covering the costs of natural gas during winter months. The term “minimal gas supply” is misleading as there is no guaranteed permanent gas supply.

The Flemish Public Centres for Social Welfare/Action can opt to participate in this policy measure, in which case they can reclaim 70% of the cost of the financial aid from the distribution network operator. The remaining 30% is paid either by the municipality or by the customer. This system is *for prepayment meter users only*. However, in Flanders, not all Public Centres for Social Welfare/Action take part in this system, as only 230 centres are participating (+/-70% and rising). But some major cities such as Hasselt, Roeselare or Lokeren do not participate.²⁴ Moreover, with only 3 695 beneficiary households, or 13% of all prepayment users, the share of people supported is rather modest.

In Wallonia, the system is for protected customers only. Other conditions are the same as in Flanders: people need to have a prepayment meter, have to be supplied by the distribution network manager and have to apply for the allocation themselves. Then the Local Advice Commission decides whether and how much financial aid a customer can receive. The support can be for a maximum of 70% of the invoice. The Brussels-Capital Region does not apply this system.

Quite a lot of the (Flemish) interviewees with a prepayment meter for gas can get financial support during winter. In most cases, interviewees welcome this support, but claim that it is not sufficient. Some interviewees complain about the fact that they have to repay [a part of] their minimal supply to the Public Centres for Social Welfare/Action. Not all centres reclaim the amount from their clients. In a sense, the repayment of the financial support *afterwards* is against the philosophy of a *prepayment* meter. The prepayment meter was introduced in order to avoid debts, but the repayment of the financial aid can again cause debts to occur.

Some people in energy poverty reported a tense relationship with the social worker about gas supply. As an example: X was entitled for a minimal gas supply. The first year she applied for it but did not get it. Her social worker would only provide her with a minimal supply if she went into debt management (it is allowed to impose certain conditions on the minimal supply), which she refused, finding it intrusive. The next year, she never received an invitation letter to apply for the minimal supply although all clients with a prepayment meter for gas should receive one. An automatic allocation of this right would help people who are not aware of these policy measures. It would also avoid discussions during the social inquiry (about letters received) and free up time for social workers.

In the interviews, there were many recommendations related to a minimal gas supply. Most of them dealt with the voluntary character of the measure and the payback system for the 30% financial aid. One idea mentioned in the interviews was “a guaranteed gas supply

²⁴ Own calculations are based on Eandis and Infrax data about minimal supply in winter 2016-2017.

during peak hours”, with peak hours referring to the few hours immediately before and after school when children are present in the dwelling. Although understandable, it is probably not the best way to tackle cold homes. First, it is technically impossible to restrict timing, at least with the currently existing analogue metering systems. In the future, it may be possible with digital and/or smart meters. More importantly, it would not be fair to people who are ‘stuck’ at home during the day due to retirement or illness. Another rather similar suggestion to avoid gas disconnections during winter was an “unlimited emergency credit during cold periods”. The same argument – the entanglement of debts – is true for this suggestion. A third concern expressed during interviews was the fact that currently, all people receive an equal amount of minimal gas supply, which is adapted to the type of dwelling, but not adapted to the energy efficiency of the house. The recommendation is to give a higher supply to people with badly insulated homes.

This recommendation is worth considering. It could be further refined according to, e.g., the composition of the household. This would certainly contribute to the system fairness but would require extra administrative work, and hence raise the question of whether the costs will outweigh the benefits. In Wallonia, these reflexions led to the idea of a “progressive and solidary pricing”, which was adopted by the government in 2014 but abandoned in 2016.

Implementation

We recommend making financial aid for gas supply available in all municipalities. In the Flemish Energy Poverty Programme, it is recognised that “the optional character of the policy measure leads to a situation in which energy users do not have equal rights”. In the ‘action list’ that follows this statement however, there is no action suggested to deal with this shortcoming. The only step undertaken so far is to try to convince the Public Centres for Social Welfare/Action to adopt the system by lowering the administrative burden. We therefore recommend that the system is mandatory in the whole Flanders Region, and that a comparable system is set up in Brussels and Wallonia. Because of the specific context in the former Region, there should be other ways to qualify, rather than just having a prepayment meter. In addition, whereas the period and the amounts are equal all over Flanders, one of the biggest differences between municipalities is whether energy consumers have to repay a part of the financial support or not. We thus further recommend a uniform application of the system of supporting a minimal gas supply in the most favourable way to these vulnerable consumers.

The automatic allocation of financial aid to a certain group (e.g. all prepayment users), the extension to some other groups (e.g. non-prepayment users that meet certain requirements) lead to an extra cost. To manage these, there are two possibilities: 1) to increase the contribution of the distribution network operator and to compensate the cost by charging all other users, or 2) to look for new financial resources. There is a need for a detailed study of the effects on the overall prices for the suggestions made.

2.1.2. Recommendation 2 on the right to energy

2. To recognise the right to energy as a fundamental right

Article 23 of the Belgian Constitution guarantees to all its citizens a set of fundamental economic and social rights to live a life in conformity with human dignity. The right to energy should be considered as one of these fundamental rights and therefore be mentioned in the Constitution. The rights cited include the right to work, the right to social security, the protection of health, a social, medical, and legal assistance, the right to adequate housing, the right to the protection of a healthy environment, the right to cultural and social development, the right to family benefits. Article 24 § 3 also refers to the right to education.

Justification

Access to energy is also a fundamental social right. As our interviews showed, citizens who do not have access to energy cannot live a decent life as guaranteed by the Belgian

Constitution. It is thus necessary to include access to energy in the Constitution, at the same level as other fundamental social rights. This complementary social right would improve legal processes at all institutional levels for creating legal obligations on the different stakeholders of the Belgian energy field, in particular the distribution system operators that would be required to guarantee access to continuous energy, in various ways, to the entire population.

Implementation

The right to energy is a fundamental social right that must be guaranteed by the legislator. It should be added to the list of fundamental rights guaranteed by the Constitution to enable all citizens to have stable access to energy.

2.2 Prices of energy

On the energy market, customers can choose a supplier and by doing so, they can find the most attractive price. It is however known from official statistics, and confirmed during the interviews, that switching suppliers is not a usual practice for vulnerable consumers. Some respondents do not know that it is allowed or where to start to do so. Not all of these vulnerable consumers know their consumption, let alone that changing suppliers is free of charge. Nor do they necessarily know whether they have a market tariff or the social tariff. For this, it is important for people living in poverty that these rights to the most advantageous tariffs are allocated automatically. The arrangements for enjoying the social tariff are complicated. They are different in the three Regions and we recommend a fine-tuning and harmonisation of the beneficiary groups. An often-heard proposal that goes further than this recommendation is the addition of a new criterion based on income. This could mean that people on low incomes that nowadays do not belong to one of the existing beneficiary groups could benefit from the social tariff. On the other hand, it means that certain persons that are entitled because of a certain social statute would lose the right if their income is above the threshold. A few years ago, the federal ombudsman made a proposition²⁵ just to enlarge the access to the social tariff for people who have a preferential reimbursement for health insurance. One of the criteria to qualify under this statute is being on a low income.

A final remark regarding prices is that the total price is far above the commodity price (i.e. the pure energy price without distribution network costs, taxes, levies and VAT). It would be fair to exclude the costs for public service obligations and costs for a green energy transition from the total price and finance these costs by means of public resources generated from income or corporate taxes. Another suggestion in this respect is similar, but applicable to a smaller group. Poor households would pay the pure energy price and be exempted from taxes and levies. For electricity, this commodity price represents 25% (in Flanders and Wallonia) and 30% (in the Brussels Region) of the price billed to the residential consumer, while for gas, the proportions range from 37% (Wallonia) to 43% (Brussels Region) and 48% (Flanders).²⁶

2.2.1. Recommendation 3 on the social tariff

3. To expand the target group of the social tariff

One of the most important policy measures to relieve energy poverty in Belgium is the so-called social tariff, a beneficial tariff for electricity and natural gas that is granted to certain target groups. These groups differ from one Region to another, and it is not always clear why certain groups are entitled and others are not. We recommend an expansion and a fine-tuning of the target group.

²⁵ https://www.ombudsmanenergie.be/sites/default/files/content/download/files/advies_14007.pdf (in Dutch) or <https://www.mediateurenergie.be/fr/node/597> (in French).

²⁶ <https://www.creg.be/nl/consumenten/prijzen-en-tarieven/hoede-energieprijs-opgebouwd> (in Dutch) or <https://www.creg.be/fr/consommateurs/prix-et-tarifs/comment-est-compose-le-prix-de-lenergie> (in French). Last update: October 2019).

Justification

The social tariff is the lowest tariff available on the market. It is calculated by the Commission Regulating Electricity and Gas (CREG) for the entire country. This policy measure helps people or families to pay their utility bills with favourable tariffs for gas and electricity for specific categories. Energy suppliers are compensated for the lower tariffs by the federal government that finances this operation by taxing all other non-eligible households. The following categories are eligible: 1) those entitled to a specific allowance of the Public Centre for Social Action (e.g. a living allowance), 2) the disabled receiving an allowance, 3) those receiving a specific allowance of the Public Service for Pensions or 4) social tenants in a building with collective heating. Three of the categories of beneficiaries find their origin in other social benefit conditions (1-3) and only one is directly related to a specific energy situation (4). The Brussels and Walloon parliaments have opted to expand this federal definition. On certain conditions – being in debt mediation, or in a collective debt arrangement, or in financial guidance, or receiving an improved reimbursement of the medical insurance (only in Brussels) – these persons can also be provided with the social tariff. In Flanders, this enlargement does not exist and it is not mentioned as an action point in the Energy Poverty Programme.²⁷

About 9% of Belgian households benefit from the social tariff.²⁸ This is far below the share of people at risk of poverty and social exclusion (20.3% in 2017, see Eurostat, 2019) and below the joint estimations of measured (14%) and hidden energy poverty (4%), according to Delbeke et al. (2017).

It was striking to notice that most interviewees are unaware of the existence of this measure. In most cases, as mentioned above, they do not know which tariff they pay.²⁹ This can be partly solved by putting the applied tariff more prominently on the invoice. A better solution is to allocate social rights automatically. Most often, this is the case but as the interviews illustrated, people who do not receive this social aid automatically will probably be unaware of the existence of their right. Only a minority of our respondents were very well informed – they knew that they are not entitled and regret that e.g. an unemployment benefit or a low income does not grant this social right.

Implementation

We recommend enlarging the group of beneficiaries. We advise the government of each Region to expand the right to the social tariff to those: 1) in debt mediation, 2) in collective debt arrangement, 3) receiving an improved reimbursement of the medical insurance (as done in the Brussels Region). An alternative is an adaptation of the definition of a protected customer by the federal government. The definition used by the Social Heating Fund could serve as an example. Since an enlargement of the target groups is financed by all other customers, it is useful to study the effects of certain scenarios on the invoices of others.

2.2.2. Recommendation 4 on the protection of consumers against sales malpractices

4. To prevent abuse when selling energy by door-to-door or phone

More severe sanctions should be set up to target subscription frauds: even if they are reported, there is generally no follow-up) to protect consumers already experiencing financial difficulties.

Justification

Door-to-door, internet and phone solicitations may cause higher energy bills for the most vulnerable groups in the population, as well as for other households. Companies that send

²⁷ In this Programme, there is one suggestion (action 17) concerning the improvement of the social tariff, namely in the case of central heating management.

²⁸ CREG, <http://www.creg.be/sites/default/files/assets/Prices/boordtabel.pdf>, consulted in September 2017.

²⁹ We could not check whether the interviewees were entitled or not. We rely on what people told us.

salespersons are acting with impunity according to our respondents. This opinion was corroborated by several users' committee members.

As an example, the following story was told by an interviewee, whom we call Jasmine. A woman came at her door to make her change her energy subscription but that woman only said that she needed the interviewee's signature to give her access to a lower tariff. It happened just after the birth of Jasmine's baby and she was feeling confused. She asked if she really had to sign, she did not feel like it, but the woman insisted. Then Jasmine realised that her energy invoice was even higher:

"I think many people are being duped, they think it's their consumption, but they are paying managing costs [for something] they did not even asked for!" (Jasmine, Brussels Region).

"I was searching on the internet to compare suppliers, and (...) for supplier [Z], you have to fill in an online form in order to know your monthly rate. Suddenly, I got a bill of 180 € and I didn't understand. (...) They said I had sealed a contract online. I said: 'No, I was just looking, I didn't sign anything. (...) They never sent me a contract that I had to return with my signature, so I said I didn't have an agreement with them.'" (Anna-Maria, Flemish Region).

Implementation

An existing campaign against door-to-door scamming highlights this problem frequently met by people living in energy poverty. This campaign promotes a sticker that one can put on the mailbox to warn the prospectors that they are not welcome. If the door-to-door seller tries his/her luck anyway, it might be considered as aggressive marketing. But a campaign is not enough: companies that are misleading people by phone, internet or through door-to-door solicitation, with an unintended contract to a new energy supplier as a result, should be legally prosecuted and charged with high fine.

Intentionally misleading households should, in our opinion, be punished – for example when a (real or virtual) seller asks someone to sign and/or fill a form "to get more information", or "to prove that the door-to-door seller came by", forms that are not supposed to lead to a contract, when in fact, that is ultimately what happens. Showing false figures or pretending to speak in the name of a certain organisation or supplier when it is not the case are other examples of intentionally misleading. To offer a platform (online or via regular mailing) to collect complains is not enough, especially as companies can argue that it is only a dishonest seller acting without his/her employer's agreement on the marketing method. One way to deal with this is to decide on a certain number of complaints above which it would result into a global complaint (that could be led by a consumer organisation for instance) brought to Court. The possible consequences of that complaint could be considerable costs to pay for damages and/or public accusation of fraud in front of a judge with legal sanction. A label could also be created to bring to the fore companies with honest and reliable practices.

3. HOUSING POLICY

As to housing policy, a major concern is the private rental market. There is a range of options possible, varying from stimulating premiums for landlords who do a certain effort to retrofit or a more penalizing policy. Or, for instance, there could be an obligatory certificate of conformity re a minimum standard of energy efficiency of the dwelling. Three recommendations for a more efficient housing policy are grouped in this section.

3.1. Rental market

3.1.1. Recommendation 5 on a rental legislation that caps the rents

5. To institute stronger legislation on rents

We strongly recommend determining a cap for rent cost that matches the actual characteristics of the dwelling. Indeed, the absence of rent control is a problem that people in energy poverty mention as one of the main factors explaining or aggravating their energy

poverty situation. It was also pointed at by the social workers met during the field research in the Brussels Region.

Justification

Due to housing scarcity on the market, a dwelling will always be rented, no matter the price. And the rent is the most important expense in the budget of tenants. Therefore, this situation often constrains households to the “choice” of a cheaper rent over an energy efficient dwelling.

Various reasons can prevent someone to get a decent dwelling, even if it is against the law: for the people in the most precarious positions, pressure on the rental market is even more significant, due to discrimination on ethnic basis or on the origin of the income for example; some owners do not hesitate to take advantage of this discrimination, and illegal subleasing makes it difficult to detect and prevent that kind of business. This discrimination phenomenon had also been highlighted in a study conducted in the Brussels Region by researchers from the University of Gent and the Vrije Universiteit Brussels (Verhaeghe et al., 2017): “From the correspondence tests, it appears that there is huge discrimination against rental candidates with a North-African or a Sub-Sahara African name. In 23% of the rental advertisements, male candidates with a North-African name were systematically adversely treated in comparison with male candidates with a French name.” Moreover, according to the same study, real estate agents in Brussels Capital Region discriminate because of the source of income. In one third of the rental advertisements, the rental candidates with unemployment benefits were systematically adversely treated in comparison with rental candidates with a wage, even when the levels of both incomes were similar. Before tackling energy efficiency of a dwelling, one should make sure to secure first the access to a proper dwelling.

Implementation

A path forward proposed by several associations is the “rents guide” that aims to target unfair prices by showing what should be a reasonable rent according to the actual characteristics of the dwellings, including its energy performance certificate (see the indicative grid online for the Brussels Region).³⁰ To address this objective, we suggest that each Region work on a new indicative grid that would help to determine a reasonable price range according to the quality of the dwelling to rent.

An additional or alternative solution could be to initiate a declining rent (to some extent) as time goes on for dwellings with serious and persistent insulation and/or dampness problems and/or a worn-out heating system that are not retrofitted to be in line with standards. The constraint seems to be the only way for some landlords for whom renting is a source of financial revenue, but this revenue should be declining (with a minimum limit to be determined) if no effort is done to ensure the basic thermal comfort of their renters. This implies two more things: control and complaints. First, as a systematic control would be very expensive³¹, we recommend organising random controls to check that minimum standards of comfort are respected, and to publicise this quality control measure a lot (because making laws is not sufficient, since laws are known to be frequently violated). Secondly, the complaint system should be improved so people would not be discouraged by delays and procedures when it comes to claim about healthiness or security of their dwellings. The objective is that renters would no longer be forced to pay excessive prices due to the rental market and lack of regulation on rents, affording them the fundamental right to be housed. It also could prevent forcing people with low budgets to rent far from their job and/or their children’s schools in relegation zones because of inaccessible prices, and allow more people to have higher life comfort. If declining rents were adopted, it might also encourage some owners to improve their real property to the best benefit of all.

³⁰ <http://www.equipespopulaires.be/etude/renegociers-les-loyers-abusifs-decembre-2016/>

³¹ As several users’ committee members have highlighted it.

But there are possible negative effects given the costs associated with this measure. One should be careful with the financial repercussions that this measure could have: a higher rent if the owner has to pay (partly or entirely) renovation expenses; or, if the State is taking over all the extra costs (to hire inspectors etc.), there is a risk that one or several federal budget would be diminished. This is why we advise organising random controls with great media cover in order to optimise their impact.

3.2 Housing quality

3.2.1 Recommendation 6 on standards of insulation in the law on healthy housing

6. To incorporate insulation standards into the existing law on healthy housing

To fight energy poverty at the source, standards on insulation and energy efficiency of the heating system should be incorporated into the existing law on healthy housing.

Justification

Our interviews show that poor insulation in dwellings is a frequent problem encountered by both tenants and owners, in both social and public housing markets.

Implementation

Bonuses already exist to help house renovation and changing heating system for lower budget owners, but few people use them: they are not well known, landlords do not have the tendency to invest in home quality for their tenants, and the procedures tend to be too complicated. However, interviews with landlords show that positive outcomes may happen when owners have good advice and professional help to get a renovation bonus and/or when they can rely on the positive experience of an acquaintance. That is why much more means should be invested on campaigns and on renovation advisers who would help owners with low budgets and/or low interest (because they are not living in the building that should be renovated) to go through all the administrative steps.

If living in retrofitted dwellings, renters would then be able to pay less to warm properly their dwelling, with positive impacts on their consumption and therefore on the environment but also on their bills. Furthermore, healthier dwellings, and thus healthier people, would have positive impacts on the social security system, as demonstrated by the study of Eurofound (2016). But a possible negative effect would be a higher rent charged so the owner would cover his or her renovation costs. This is the reason why this recommendation should come with the support of the State to limit rent inflation (for example with an improved bonus system).

Quite a lot of possibilities exist to promote dwelling renovation, such as tax deductions, energy and renovation grants, green loans, social insulation projects for renters, free energy audits, etc. It would be useful in further research to collect and analyse experiences and examples from social workers who try to help their “users” but clash against the limits of the system. Is it purely a matter of income? A matter of available working time? A matter of convincing landlords? Or not knowing where to refer to for information? Where and why do they find themselves stuck despite the existing policy measures?

3.2.2. Recommendation 7 on unsecure or unhealthy dwellings

7. To shift the risk of a condemnation of a dwelling away from the tenant

Existing policy measures aimed at an improved quality of rental houses are based on the concepts of reward on the one hand (premiums, guidance...) and punishment on the other (the house can be condemned when it is considered no longer safe to live in). However, in this latter case, the tenant does face the highest risk since there is no guarantee that an alternative dwelling is available. We recommend a series of possible interventions to protect tenants who find themselves in this situation.

Justification

As our respondents stated, and as we could notice during our interviews at the home of the interviewees, some dwellings were in a very bad state.

Some deficiencies had to do with energy management and efficiency, others were more related to the general construction. We saw windows with woodworms, windows without glazing, and windows that could not be opened, or closed properly; water taps that were dripping and in one case, even constantly running; filthy and (very) outdated bathrooms; walls, ceilings and corners with mould; houses with no insulation of the walls, floor, and roof; weird electric sockets and even an electrical heater next to a shower. We had testimonies about unstable terraces and front walls, and from a woman who fell with one leg through a wooden floor; about Eternit (a type of fibre cement containing asbestos) panels; about stoves with bad ventilation, and much more. We recorded bad experiences with slumlords in all three Regions and saw a small two-room 'apartment' that was let for over 500 € in Antwerp.

So how does it come that these dwellings may still be rented out despite all these imperfections and despite the existence of legislation protecting tenants and legal requirements? A lack of income (e.g. someone in debt mediation) can certainly be a reason why people are unable to move, but it is clearly not the sole cause.

Interviewees knew from the beginning that their dwelling was not energy efficient, but they simply had no other option. Two respondents had been on the street for a few months and they clearly stated: "this never again". Certainly, families with kids did not want to risk ending up in the streets.

Some people explicitly mentioned the "Catch-22 situation" they were stuck in: to stay in their house is bad, but to leave it may be even worse. They could start a condemnation procedure, but the consequence of a positive decision is uncertain. Emergency social housing is limited in time and the private market is full. The next quote illustrates the fear with which people are struggling, whether or not the figure cited is correct:

"The Public Centre for Social Welfare/Action of [his city] suggested to me, as well as the social housing company, to start a condemnation procedure, in order to get priority for a social housing unit. I was informed on the risk that nine times out of ten, it would not be accepted, and I could become homeless." (Paul, Flemish Region).

All these findings lead to the conclusion that 1) houses in the lower rental-costs segments are (very) often of (very) poor construction quality and (very) poor energy efficiency, 2) the shortage of dwellings for low-income people makes that even worse as these dwellings of bad quality can easily be rented out. Moreover, these poor-quality dwellings will not improve or 'disappear' automatically by some kind of market selection and 3) this shortage places people in a powerless position: the lack of alternatives and the fear of ending up homeless mean that people do not "choose" a home, but have to "accept" whatever they can get.

Implementation

We recommend that the regional and federal governments find solutions to shift the risk of a condemnation of a dwelling away from the tenant. There are some possible pathways to achieve this. A bigger housing stock is crucial. Therefore, governments should give absolute priority to large interventions in the private rental market. The financial resources that are now reserved for owners could be reoriented towards tenants. Secondly, governments have an important role to play in the increase of the housing stock, namely the social one. The share of social housing in Belgium is very low compared to neighbouring countries. Both pathways will enlarge the market and provide tenants with more options. Thirdly, the existing mechanisms of condemnation and fines intended to prevent landlords from letting obviously deficient houses are apparently insufficient and should be reconsidered. Finally, improved safety mechanisms for tenants should make it more common for competent authorities to

decide that a certain dwelling is indeed inhabitable. The tenant who takes the risk to start a procedure should not be punished for his or her courage.

4. SOCIAL INTEGRATION

Besides our suggestions to improve regulations or to create new ones, we also have some recommendations aimed at building from the best mechanisms of existing structures and dynamics. Fieldwork and literature showed us that a certain number of initiatives were quite positive and we thought about how to expand them and how to improve local networks and their visibility.

4.1 Synergy among social workers

Social workers often reported to us their aspiration to reach more people with their services, knowing that many potential beneficiaries are not aware of the existence of certain structures.

4.1.1. Recommendation 8a on social-work coordination

8a. To better coordinate Public Centres for Social Welfare/Action and NGOs

The Public Centre for Social Welfare/Action is the institution of reference for fighting against poverty and, consequently, for fighting against energy poverty. However, they are facing an increasing number of households living in a precarious energy situation but with diminishing resources to do so. More funding of social coordination on the local scale between the Public Centre for Social Welfare/Action and all public and private services related to energy poverty by the federal and regional governments is therefore particularly recommended.

Justification

Our interviews show that social assistance is essential for overcoming the numerous adversities engendered by unequal social situations. Invested by the federal and regional authorities in a series of missions, the Public Centre for Social Welfare/Action is and remains the last protection of weakened citizens. As for energy, the missions deal with information on various policy instruments as well as preventive and curative support for households. Social workers and energy tutors offer their services inside the Public Centre for Social Welfare/Action but also at home for persons in need.

However, these Public Centres for Social Welfare/Action are confronted with a double problem that hampers their proper functioning: the increasing number of households living in energy poverty, but without increase in the human resources allocated for social action. This problematic situation has a series of negative impacts both for citizen in social emergency and for the working conditions of a staff increasingly put under pressure.

“In two years, I saw (my social worker) only three times. Only three meetings of half an hour in two years!” (Lucie, Brussels Region).

“The public centre for social action is saturated with requests. From my point of view, my file is urgent but according to their criteria, they have piles of emergencies. Now I am waiting for the answer” (José, Walloon Region).

People in energy poverty are in situations that can worsen quickly. It is therefore necessary to provide them with the most efficient service possible, while relieving the burden on social workers. One of the possible solutions at the local level is the reinforcement/creation of a networked social action between the Public Centre for Social Welfare/Action and the other public services and non-profit organisations active in the field of energy poverty.

Implementation

We recommend that the federal and regional authorities provide better funding to the Public Centres for Social Welfare/Action to enable them to create or strengthen social coordination at a local scale in order to cope with the growing phenomenon of energy poverty.

4.1.2 Recommendation 8b on “Energy Clusters”

8b. To encourage the creation of “Energy Clusters”

For people living in energy poverty, information on energy and housing can be particularly complex to collect. Organizing this into “Energy Clusters”, a grouping of services dedicated to energy and housing, each with its own specificity but collaborating transversally, could reach more the concerned public.

Justification

There are numerous testimonies in our research that show that people have difficulties to know about or to understand social tariffs, invoices, or steps for getting energy premiums.

“The Energy Cell really did what was necessary for me to be able to benefit from an advantageous rate (for gas and electricity) because I am entitled to the reduction for modest incomes. I was not even aware that I could benefit from it” (Martine, Walloon Region).

“You already have to dedicate so much energy to ‘how can we eat as cheap as possible, how can we live as cheap as possible, how we can get energy as cheap as possible... So that often, for those things, you don’t have energy left anymore. And I think that’s terrible and that you have to ask for everything yourself. (...) they assume that you know everything. And yes, if you don’t know it, that’s bad luck for you” (Renate, Flemish Region).

“I was really stressed (...) without the “energy desk”, I think, I don’t know how people are doing it, it’s really difficult [to go through a renovation bonus procedure]” (Rose, Brussels Region).

Struggling for a decent living, searching for information via Internet require energy and competences. Furthermore, public centres for social action/welfare sometimes suffer from a stigmatising image and some people do not ask for help or are ashamed to enter there.

Implementation

Encouraging collaborative work or even a grouping among social services dealing with housing and energy poverty can create a “snowball” effect, that is to say, accelerating and improving significantly the support of persons in energy poverty. Therefore, “Energy Clusters” that bring together specialised services in the various aspects of energy poverty should be further encouraged. These services would have complementary missions and would operate transversally to determine a common path of support and accompaniment of the person in a symbolically more neutral place than the public centres for social action/welfare.

4.2 Proactive approaches and mutual help

4.2.1. Recommendation 9 on developing the capacity of action of the energy poor

9. To develop the capacity for action of people living in energy poverty

The feeling of powerlessness is present among people living in energy poverty. It hampers their coping, including (but not only) their search for information. On the other side, social workers have the expertise to improve the daily life of people living in energy poverty. Policies should encourage new methods of social support aiming at restoring the capacity for action of people living in energy poverty.

Justification

As shown by our interviews (see Chapter 6, section 5.2.4) and by our quantitative analysis (see Chapter 5, section 2.4), a number of people living in energy poverty feel powerless. Moreover, society asks them to be autonomous but does not often give them the possibility of being truly autonomous. Indeed, they depend on their energy provider or on their owner who impose rules or their own views on things.

Many of our interviewees acknowledge the significant help provided by social workers. However, others have had a bad experience where they felt negatively judged, and above all, ashamed and deprived of their own capacity of action.

“I went to see the social worker (of a Public centre for social action) ... sometimes, I need a helping hand. “Oh, you exaggerate, you already came six months ago”. It’s not like if I go there every week either, I do not ask for charity (...). That’s why I do not want to see her anymore, even though I know that I have rights. She said: “You just have to resell your car”. First, my car is 16 years old, I do not see how much I would have. “It is to save insurance and tax circulation” (...) I answered “I still prefer to be homeless and live in my car than to find myself stuck [home], because without a car, how would I find a job?”” (Anna, Walloon Region).

Julie qualified her home as a “dump”, and do not feel understood by her social worker as she usually only says her: “you can condemn [your housing company], but if you don’t have another house within six months, you’ll end up on the street”” (Julie, Flemish Region).

We have noticed that information, good practices, and knowledge are easily exchanged in an equal-to-equal relationship in which everyone keeps control of his/her life.

“That’s what I was saying to my neighbour: “Listen, you too, you’ve to go for it, go on because we’ll never have this chance again [to benefit from] a ‘neighbourhood contract’” (...) now I know how to do it (...) so we took the lead with my neighbour” (Nadia, Brussels Region).

We also recommend an accompaniment by social workers who would consider people in energy poverty as full partners with the expertise to act on their life. Two illustrative methods follow. First, the Networks of Reciprocal Exchanges of Knowledge, co-founded by Claire Héber-Suffrin (2011), are primarily based on the positive reciprocity of knowledge and learning in a collective framework. Second, the Federation of the Walloon Public Centres for Social Welfare/Action has developed an action research project in 2009 focused on "developing the agency for people and communities", in partnership with the University Laval in Quebec. Yann le Bossé (2012) defines this process as follows: “a process whereby people access together or separately a greater opportunity to act on what is important to themselves, their loved ones or the group to which they identify” (Le Bossé, 2012).

Implementation

These new methods of individual and collective social support could be set up by any Public Centre for Social Welfare/Action or a non-profit organisation working in the field of energy. A dedicated budget allowed by the federal and regional authorities for these specific innovative projects would also help to set them up and to reach a better-targeted population.

The methodological aspects of this kind of social support project are of great importance. It is necessary to ensure that the collective animation and/or the individual accompaniment do not deviate towards a disguised social control where a teacher-student relationship or dominant-dominated relationship is established. It is therefore essential to respect the basic rules governing the functioning of such a methodology, such as a reciprocally respectful relationship, and to ensure that these activities are carried out by duly trained persons.

5. SUMMARY

As a concluding reminder, our nine recommendations justified above are thus as follows.

1. To set up or improve a system of minimal gas supply in every Belgian municipality during the winter months;
2. To recognise the right to energy as a fundamental right and to add it in Article 23 of the Belgian Constitution;
3. To provide more support and information to people in energy poverty to choose the most advantageous energy supply contract and tariff, to expand the groups benefiting from a social tariff (e.g. by adding an income criterion) and to automatically allocate the social tariff to those who have a right to it;
4. To prevent abuse by those selling energy door-to-door or by phone;
5. To establish a mechanism for controlling rents, such as a stronger legislation or a rents guide showing what is a 'reasonable' rent according to the actual characteristics of dwellings, notably including its energy performance;
6. To include minimum standards of insulation and of energy efficiency in the law on housing healthiness;
7. To shift the risk of a condemnation of a dwelling away from the tenant;
8. To develop and financially encourage synergy among social workers;
9. To adopt new practices of social support aimed at restoring the capacity for action of people living in energy poverty.

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9. CONCLUSIONS

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To conclude this important research on energy poverty, we first turn back to and answer the four initial research questions that were presented in Chapter 2. By their transversal character, they provide a good way for summarising our findings across the chapters. We then conclude with a call for policies dedicated to fight energy poverty in Belgium and its Regions.

1. MAIN FINDINGS ANSWERING THE FOUR RESEARCH QUESTIONS

As expressed in Chapter 2, the research questions are the following:

1. Who are the households living in energy poverty in Belgium and what are the generation and gender aspects of this phenomenon?
2. Do persons living in energy poverty experience other fragilities, especially regarding relationships, mobility, and self-reported health?
3. What are the daily practices of persons living in energy poverty, especially those related to energy consumption, and what meanings do they give thereto?
4. How can we translate the voice of people living in energy poverty and experiencing other fragilities into policy recommendations?

1.1 Who are the households living in energy poverty in Belgium and what are the generation and gender aspects of this phenomenon?

The answer to this group of research questions first requires defining who is in energy poverty in Belgium. There is no official definition of energy poverty in Belgium, as opposed to France for example. In this situation, and as underlined in Chapter 4, the prevalence of energy poverty in Belgium varies considerably according to the criteria used to define which household, or what person, is in energy poverty. Therefore, the proportion of households in Belgium that are in energy poverty ranged in 2012 from 0.2% (households disconnected for electricity – the figure is the same for those disconnected for gas) to 14.0% in “measured

energy poverty” (targeting households dedicating too high a proportion of their budget to energy costs) as well as 4.6% in “hidden energy poverty” (targeting households dedicating too low a proportion of their budget to energy costs), as calculated by Delbeke and Meyer (2015). These authors explain in this publication why and how they define “too high a proportion of the household’s budget” and “too low a proportion” (see also Meyer et al., 2018). A further criterion reviewed in Chapter 4 is being granted a social tariff: for their electricity consumption, 8.2% of households had such a benefit in 2012, and 8.5% for gas. Thus, the proportion of people / households living in energy poverty depends on the point of view taken: it is either based on a policy approach – the so-called “beneficiaries” or “users” (see also Chapter 7) of a given policy instrument – or on a normative point of view, for example on a correct way to spend the household income.

In Chapter 5, still another approach is put forward: a relational one, following Fitzpatrick (2014). This relational approach is expressed in two ways: 1- our typology of all households in Belgium is based on the perception of the household income adequacy and on affordability problems in keeping the house adequately warm, or on the experience of having arrears in paying energy bills, as defined by the persons themselves; and 2- our comparison between energy-poor households and other less-poor social groups.

On these grounds, and using the data collected in the Belgian survey of Generation and Gender Programme, energy-poor households represent 10.3% of the households in 2009. Unfortunately, this figure cannot be updated because no similar survey as the one realised under the Generation and Gender Programme has been undertaken in Belgium since then. Following our definition, we classify the respondents to this survey as energy poor if they report that for their household, it is either very difficult, or difficult, or rather difficult to make ends meet AND that they find themselves in one of the three following situations: they have affordability problems to keep the house adequately warm, or they have had arrears in paying their utility bills in the last 12 months, or they have both problems.

Who are the households living in energy poverty in Belgium according to the above definition based on the Generation and Gender 2009 survey? Their mean income is rather low (1164 € per month, in 2009) but their socio-economic characteristics described in Chapter 5 are varied and heterogeneous, so the answer to the above question must be nuanced. Indeed, in Belgium, and contrary to some stereotypes, more than two households in energy poverty out of five in that situation own their dwelling and the same proportion live in semi-urban areas or in rural ones. Furthermore, half of the respondents of these energy-poor households have at least 12 years of education with the corresponding diplomas.

Regarding the gender and age of the surveyed person of households living in energy poverty, there are proportionally much more women (60.3%) than men (39.7%), and the mean age of these respondents is younger (46.1 years) than in the other categories of our typology on affordable warmth, developed in Chapter 5. But as both characteristics (gender and age) are those of the respondent to the survey, it is more interesting to turn to the household as a whole and study the living arrangements.

In energy poor households, the main living arrangements are the following. More than one fifth of these households are made of one man living alone, and the same proportion of one woman living alone (the latter is likely to be underestimated, see details in Chapter 5); 29% of the energy-poor households include a couple, with or without dependent child(ren); one-parent families represent nearly one household out of seven energy-poor households (14%), the large majority (90%) of these lone-parent families being headed by a mother (note that the dependent person(s) may also be a grand-child, or sibling(s) of the respondent); and finally, another 14% of these energy-poor households are found in the three other types of living arrangements (two adults; other types of households with no dependent person; other types of households with at least one dependent person).

A comparison by gender and age group of the respondent has shown that for the respondents living alone, the likelihood of living in energy poverty is similar for men and

women if their age is less than 60 (16% under 40, 18% between 40 and 59), and is higher for women after this age. For the women in one-parent families, the likelihood of being in energy poverty is highest if they are aged under 40 (35%), and is far from being negligible after that age (21% between 40 and 59 and 14% after 60).

Summarising the generation and gender aspects of living in energy poverty in Belgium also means considering how the equality between women and men that is stipulated in the 2000 Charter of fundamental rights of the European Union is ensured in the areas of energy-efficient housing and energy services. The figures above drawn from Chapter 5 clearly show that equality between men and women in these areas is not achieved in Belgium.

1.2 Do persons living in energy poverty experience other fragilities, especially regarding relationships, mobility, and self-reported health?

In the beginning of the research, we had indeed hypothesised that social isolation, mobility problems as well as health problems including poor well-being were associated with living in energy poverty – associated with, not necessarily caused by energy poverty or a consequence thereof, because our approach is systemic rather than causal. Indeed, these issues were the most commonly expressed during the qualitative interviews as detailed and exemplified in Chapter 6. From a methodological point of view, the question remains whether these issues were most often raised during the interviews because they were prompted by the researchers or because they are very important for the persons interviewed, or maybe for both reasons.

As expressed in Chapters 2 and 6, we first used the term ‘vulnerabilities’ for the difficulties and impairments associated with energy poverty. However, in the more recent and current academic literature on energy poverty, the concept of energy vulnerability is defined in a precise and causal way by Bouzarovski and Petrova (2015: 35) as “the factors that affect the likelihood of becoming poor” and when “combined with the systems of provision approach, energy vulnerability (...) [encompasses] the nature and structure of the home (...)”, and hence to distinguish our concept we moved to using the term ‘fragilities’.

People living in energy poverty are experiencing several other types of fragilities, and these associations between energy poverty and other fragilities seem to operate most often in vicious circles, thus reinforcing each other.

In Chapter 5, these associated fragilities were called “uncapabilities”, following the capability concept developed by Sen and Nussbaum. One important finding of Chapter 5 is that these uncapabilities arise for energy-poor households in more areas than expected, namely for the uncapability related to material property and interestingly enough, for the uncapabilities related to recreational activities (“Play”) and to culture (“Senses, imagination and thought”). Culture indeed enables the development of another social imaginary, in Castoriadis (1987)’s terms that could be more just and less energy demanding, thus more in line with low-carbon energy systems. Households living in energy poverty are also very unequal to the energy-richest households in their capabilities related to emotional management and to health and protein intake.

To reinforce these results, the in-depth interviews with people in energy poverty (analysed in Chapter 6) have indeed exemplified in multiple ways how energy poverty shrinks the physical space, both at home – only one room heated – and outside the home: weak access to private or even public transportation, and furthermore, feelings of shame and of stigmatisation (as also shown in Chapter 7). This “spatial shrink” (following the expression of Liddell and Morris, 2010: 2993) is also a “mental shrink” caused by anxiety and other negative emotions. For example, many interviewees continuously have to count the money left, if any, until the end of the month. This anxiety as well as feelings of emptiness, loneliness, or sadness are reported by a good many among the interviewees in our qualitative survey (Chapter 6) as well as among those surveyed by the Generation and Gender Programme (Chapter 5).

These spatial and mental shrinks produce a specific lifeworld (Habermas, 1987) among people living in energy poverty. This lifeworld is closely related to a feeling of powerlessness. In these conditions, people adopt what we called an agentic posture (chapter 6) when facing adversity and when trying to adapt living conditions to external constraints. The lifeworld expressed by energy-poor persons is a restricted environment strongly determined by a lack of energy provision. Most of the time, these persons express the feeling of facing a destiny that they did not choose, as they are also confronted with fraud and dishonest practices. This agentic lifeworld gives the impression of facing an uncontrolled and unjust world, which leads to an increasing feeling of low self-confidence.

To sum up, persons living in energy poverty also experience other fragilities than those initially hypothesized (social isolation, mobility problems, as well as health problems including poor well-being). These other fragilities are related to material property, leisure activities and culture as well as to negative emotions (such as loneliness, sadness, or shame) and to health, including protein intake.

1.3 What are the daily practices of persons living in energy poverty, especially those related to energy consumption, and what meanings do they give thereto?

In the in-depth interviews analysed in this research (Chapter 6), people living in energy poverty report different daily practices. Most of the time these practices refer to strategic competences developed to reduce energy consumption. The principle of these practices is mainly based on self-restriction especially heating curtailment. These restrictive practices are accompanied by adaptive and pragmatic strategies to prevent suffering from a lack of heating (using kerosene lamps, caulking doors and windows, wearing extra clothes, leaving home to go to public centres to get warm).

According to energy-poor households, these self-restrictive behaviours have a great impact on the standards of living and values they want to preserve. Parents feel compelled to reduce the well-being of the whole family by applying severe restrictions related to food, furniture, appliances, and leisure but they are strongly affected when these restrictive practices impact the well-being and daily life of their children. Using adaptive competences, people living in energy poverty try to overcome the problems they are facing. Controlling the energy consumption with self-restrictive and pragmatic practices, they behave like 'actors' (Chapter 6) but they have to face a severe shrinkage of their own well-being even though they try to preserve the quality of life of their children. In this context, energy poor households often feel that the future they want to preserve above all (their own children's well-being) is strongly affected by their living conditions.

The in-depth interviews realised in the qualitative part of the research also show coping strategies developed by people living in energy poverty. These kinds of strategies are alternative to adaptive competences. When they use coping strategies, energy-poor households refer to inventive practices such as involving the help of their entourage, their relatives, and various social public or private institutions for building new solutions. For instance, they get help from energy suppliers in negotiating plans for arrears in energy bills, or they apply new advice for energy savings and teach it to their children for a better implementation of these practices at home. These coping strategies lead to new social relationships when solidarity competences are developed with neighbours. In these circumstances, people give and receive help for better well-being, such as food, clothes, or time for child caring. It can also be collective help for retrofitting the dwelling of a neighbour.

When people are confronted with energy poverty, they mainly act in an 'agentic' posture: they hardly have the opportunity to adopt their living conditions to the external constraints. The adaptive practices they apply help them to face these external constraints but have a great impact on their own well-being and even more on the quality of life of their children considered as the main value to be preserved. Finally, even if they are subject to a

deterministic life situation, energy-poor people develop inventive coping strategies based on their family, neighbourhood or institutional support.

1.4 How can we translate the voice of people living in energy poverty and experiencing other fragilities into policy recommendations?

The interviews with people living in energy poverty in Flanders, Wallonia, and the Brussels Region allow us to understand better their daily life experiences, the obstacles and constraints related to energy poverty with which they are confronted and the practices and strategies they engage in to cope with energy poverty. Based on this, we developed a set of recommendations that would make an important difference to the life of people in energy poverty. The recommendations are related to energy policy (federal and regional levels), housing policy (mainly regional level), or social integration (federal and municipal levels).

The first recommendation is concerned with access to energy, specifically gas. We recommend rolling out a system of minimal gas supply in every Belgian municipality during the winter months. Currently, public centres for social welfare are not obliged to organise minimal gas supply. Because public welfare centres organise minimal gas supply in some municipalities but not in others, (vulnerable) energy users currently do not have equal rights.

A second recommendation, which relates to the previous one, aims to include the right to energy in Article 23 of the Belgian Constitution, which guarantees all Belgian citizens a set of fundamental economic and social rights. The right to energy is currently not included among these fundamental rights and while inclusion would not lead to a direct and immediate change in the life of people living in energy poverty, it would reflect the acknowledgment of a collective responsibility to guarantee every citizen access to energy.

The third recommendation is related to the price of energy. It emerges from our interviews (but also from official statistics on consumer switching suppliers) that many people living in energy poverty have a poor understanding of how the energy market works, what they are paying for which service and what their rights are. This results in a situation in which many vulnerable energy consumers are not having the most advantageous energy contract (and hence do not benefit from the opportunities offered by the liberalised energy market). We suggest to provide more support and information to people in energy poverty to choose the most advantageous energy supply contract and tariff, an expansion of the groups benefiting from a social tariff (e.g. by adding an income criterion) and the automatic allocation of a social tariff to those who have a right to it. Also, we think it would be fair to exclude the costs for public service obligations and the green energy transition from the total price and finance these costs out of the general government budget.

Fourthly, door-to-door, internet and phone sales of energy contracts often result in higher energy bills for the most vulnerable groups. We recommend the government to closely monitor these sales practices and intervene forcefully in case of abuse.

The next three recommendations are concerned with housing policy. Our interviews clearly show how energy poverty is strongly related to poor quality housing. Given how many people living in energy poverty mention high rent prices as one of the main factors causing or aggravating energy poverty situation, the fifth recommendation is the establishment of a rent control mechanism. The scarcity of (decent) housing on the rental market puts low-income groups in a vulnerable position, often leading them to 'choose' cheaper rent over energy efficient dwellings. Another, maybe intermediate measure, is a 'rents guide' that aims to target unfair prices by showing what is a 'reasonable' rent according to the actual characteristics of the dwellings, notably including its energy performance. As a sixth recommendation, we suggest to include minimum standards of insulation and energy efficiency in the law on housing healthiness. In any case, and this is our seventh recommendation, tenants need to be better protected if they complain about the bad quality of the housing, so that they do not lose access to housing when their building is officially labelled uninhabitable. The structural solution to all these problems is however to create a

bigger housing stock to provide more choice for low-income families and push bad quality housing out of the market.

Our eighth recommendation relates to social support and integration policies. Given its central role in addressing energy poverty, more funding and capacity for social coordination should be provided to local public welfare/action centres. In addition to that, a strong collaboration between services dedicated to energy and housing (whilst retaining their own specificity) would be very helpful to reach out and support the energy poor.

Finally, a ninth recommendation addresses the strong feelings of powerlessness that were reported during our interviews. Social workers have an important role to play here. They need to be given sufficient time and resources to develop new methods of social support aimed at restoring the capacity for action of people living in energy poverty.

2. A CALL FOR STRONG POLICIES TO FIGHT ENERGY POVERTY

In ending, we return to the concept of capabilities and emphasise the integral importance of energy and energy services in supporting a range of capabilities for individuals and households that are core to their wellbeing and ability to flourish. A household in energy poverty, however creatively they find means of coping and eking out their resources, has a high likelihood of experiencing damage to their relationships, physical and mental health, family life, cultural participation, social respect, recreation, self-development and self-worth.

Energy poverty thus has far-reaching effects, with long-term implications. There are strong indications that the burden is greater for women, especially younger single mothers, and older women compared to older men. As a country concerned with the life chances of its citizens and also with gender equality, it is imperative for Belgium and its Regions to take action on energy poverty.

10. REFERENCES

- Anderson, W., White, V. and Finney, A. (2012). Coping with low incomes and cold homes. *Energy Policy*, 49, pp. 40–52.
- Ardoino, J. and Peretti, A. (1998). *Penser l'hétérogène*. Paris: Desclée de Brouwer.
- Arendt, H. (1958). *The human condition*. Chicago: The University of Chicago Press.
- Armstrong, D., Winder, R. and Wallis, R. (2006). Impediments to policy implementation: The offer of free installation of central heating to an elderly community has limited uptake. *Public Health*, 120(2), pp. 161–166.
- Bartiaux, F., Frogneux, N. and Servais, O. (2011). Energy “Needs”, Desires, and Wishes: Anthropological Insights and Prospective Views. In: *Energy, Sustainability and the Environment: Technology, incentives, behavior*, F. P. Sioshansi (Ed.), Oxford: Butterworth-Heinemann, pp. 63–87.
- Bartiaux, F., Vandeschrick, C., Moezzi, M. and Frogneux, N. (2018). Energy justice, unequal access to affordable warmth, and capability deprivation: A quantitative analysis for Belgium. *Applied Energy*, 225, pp. 1219–1233.
- Bauman, Z. (2013). *Does the Richness of the Few Benefit Us All?* Cambridge: Polity Press.
- Beatty, T., Blow, L. and Crossley, T. (2014). Is there a ‘heat-or-eat’ trade-off in the UK? *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 177(1), pp. 281–294.
- Becker, H. (1998). *Tricks of the trade. How to think about your research while you're doing it*. Chicago: The University of Chicago Press.
- Becker, H. (1970). *Sociological work: method and substance*. Chicago: Aldine Publishing Company.
- Bernard, N. (2007). Femmes, précarité et mal-logement : un lien fatal à dénouer. *Courrier hebdomadaire du CRISP*, 1970(25), pp. 5–36.
- Bhattacharya, J., DeLeire, T., Haider, S. and Currie, J. (2003). Heat or Eat? Cold-Weather Shocks and Nutrition in Poor American Families. *American Journal of Public Health*, 93(7), pp. 1149–1154.
- Boardman, B. (1991). *Fuel Poverty*. London: Belhaven Press.
- Bogdan, R. and Taylor, S. (1975). *Introduction to qualitative research methods*. London: John Wiley & Sons.
- Bouzarovski, S. and Petrova, S. (2015). A global perspective on domestic energy deprivation: Overcoming the energy poverty–fuel poverty binary. *Energy Research & Social Science*, 10, pp. 31–40.
- Brunner, K., Spitzer, M. and Christanell, A. (2012). Experiencing fuel poverty. Coping strategies of low-income households in Vienna/Austria. *Energy Policy*, 49, pp. 53–59.
- Burbage, F. (2010). Liberté, égalité, frugalité ?. *Vacarme*, 51(2), p.24.
- Burquel, C. (2017). *Réflexions sur les pratiques institutionnelles [Reflections on institutional practices]*, presentation for a university certificate “santé mentale en contexte social : multiculturalité et précarités”, 23rd of June 2017, Brussels.
- Caron, C. and Durand-Daubin, M. (2015). Efficacité et justice des mesures de solidarité énergétique. Une régulation par les professionnels. In: *Énergie et transformations sociales. Enquêtes sur les interfaces énergétiques*, J. Cihuelo, A. Jobert. and C. Grandclément (Eds), Paris: Lavoisier, pp. 105–124.
- Castoriadis, C. (1987 [1975]). *The imaginary institution of society*. Cambridge: Polity Press. (*L'institution imaginaire de la société*, Paris: Seuil, 1975.)
- Ceulemans, W. and Verbeeck, G. (2015). *Grote Woononderzoek 2013. Deel 6. Energie*, Leuven: Steunpunt Wonen.

- Coene, J. & Meyer, S. (2019). *Barometer Energiearmoede (2009-2017)*. Brussel: Koning Boudewijnstichting. [online] kbs-frb.be. Available in Dutch at: <https://www.kbs-frb.be/nl/Activities/Publications/2019/20180315NT>, and in French as: *Baromètre de la précarité énergétique (2009-2017)*. Available at: <https://www.kbs-frb.be/fr/Activities/Publications/2019/20180315NT>.
- CREG (2011). *Evolution du tarif social de l'électricité sur le marché résidentiel*. Bruxelles : CREG. [online] creg.be. Available in French at: <https://www.creg.be/sites/default/files/assets/Publications/Others/Div-evolprixsoceFR.pdf>, and in Dutch as: *Evolutie van het sociaal elektriciteitsstarief op de residentiële markt*. Available at: <https://www.creg.be/sites/default/files/assets/Publications/Others/Div-evolprixsoceNL.pdf>.
- CREG (2019). *Etude sur le poids de la facture d'électricité et de gaz naturel dans le budget des ménages belges en 2018*. Bruxelles : CREG. [online] creg.be. Available in French at: <https://www.creg.be/sites/default/files/assets/Publications/Studies/F2012FR.pdf>, and in Dutch as: *Studie over het aandeel van de elektriciteits- en aardgasfactuur in het budget van de Belgische huishoudens in 2018*. Available at: <https://www.creg.be/nl/publicaties/studie-f2012>.
- Cytise.be. (n.d.). [online] Available at: <http://www.cytise.be/>.
- Day, R. and Hitchings, R. (2009). *Older people and their winter warmth behaviours: understanding the contextual dynamics*. [online] Birmingham.ac.uk. Available at: <https://www.birmingham.ac.uk/Documents/college-les/gees/staff/winter-warmth-behaviours.pdf>.
- Day, R., Walker, G. and Simcock, N. (2016). Conceptualising energy use and energy poverty using a capabilities framework. *Energy Policy*, 93, pp. 255–264.
- De Keersmaecker, M.-L. (2014). *Observatoire des Loyers : enquête 2013*. Bruxelles: Observatoire régional de l'habitat, Société du Logement de la Région de Bruxelles-Capitale.
- De Winter, T., Lauwereys, G., Vanderbeken, H., Dewaleffe, S., Pasteels, I. and Neels, K. (2011). *GGs Wave 1 Belgium: Fieldwork*. [online] Ggps.be. Available at: http://www.ggps.be/doc/GGP_Belgium_Paper_Series_2.pdf.
- Delbeke, B. and Meyer, S. (2015). *The Energy Poverty Barometer (2009-2013)*. Brussels: King Baudouin Foundation. [online] Kbs-frb.be. Available at: <https://www.kbs-frb.be/en/Virtual-Library/2015/20151123NT1>.
- Delbeke, B., Meyer, S., with Coene, J. (2017). *The Energy Poverty Barometer (2009-2015)*. Brussels: King Baudouin Foundation. [online] Kbs-frb.be. Available at: <https://www.kbs-frb.be/en/Activities/Publications/2017/20170313NT1>
- Dubois, U. (2012). From targeting to implementation: The role of identification of fuel poor households. *Energy Policy*, 49, pp. 107–115.
- Dumortier, C., Meyer, S., Demeyer, B. and Bacchus, K. (2006). *Etude comparative des politiques sociales en matière d'énergie*. Bruxelles: ULB, Leuven: KUL.
- Emerson, R., Fretz, R. and Shaw, L. (1995). *Writing Ethnographic Fieldnotes*. Chicago: University of Chicago Press.
- EPEE Project (2007). *Definition and evaluation of fuel poverty in Belgium, Spain, France, Italy and the United Kingdom*, WP2-D7.
- EPEE Project (2009). *Definition and Evaluation of Fuel Poverty in Belgium, Spain, France, Italy and the United Kingdom*, WP2 – Deliverable 7.
- Eurofound (2016). *Inadequate housing in Europe: Costs and consequences*. Luxembourg: Publication Office of the European Union.
- European Economic and Social Committee (2010). *Opinion of the European Economic and Social Committee on 'Energy poverty in the context of liberalisation and the economic*

- crisis' (exploratory opinion)*. [online] EU Energy Poverty Observatory. Available at: <https://www.energy-poverty.eu/publication/opinion-european-economic-and-social-committee-energy-poverty-context-liberalisation-and>.
- European Parliament, Council and Commission (2000). *Charter of fundamental rights of the European Union*. [online] Europa.eu. Available at http://www.europarl.europa.eu/charter/pdf/text_en.pdf.
- Eurostat (2019). *At risk of poverty or social exclusion in 2017*. [online] Eurostat. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/People_at_risk_of_poverty_or_social_exclusion.
- Ezratty, V., Duburcq, A., Emery, C. and Lambrozo, J. (2009). Liens entre l'efficacité énergétique du logement et la santé des résidents : résultats de l'étude européenne LARES. *Environnement, Risques et Santé*, 8(6), pp. 497–506.
- Fitzpatrick, T. (2014). *Climate change and poverty. A new agenda for developed nations*. Bristol: Policy Press.
- Frank, D. A., Neault, N. B., Skalicky, A., Cook, J. T., Wilson, J. D., Levenson, S., Meyers, A. F., Heeren, T., Cutts, D. B., Casey, P. H., Black, M. M. and Berkowitz, C. (2006). Heat or eat: The Low Income Home Energy Assistance Program and nutritional and health risks among children less than 3 years of age. *Pediatrics*, 118(5), pp. 1293–1302.
- Franssen, A. (2003). Le sujet au coeur de la nouvelle question sociale. *La Revue Nouvelle*, 12, pp. 10–51.
- Fraser, N. (2000). Rethinking Recognition, *New Left Review*. Available at: <https://newleftreview.org/issues/113/articles/nancy-fraser-rethinking-recognition>.
- Frogneux N., Luyckx, C. and Bartiaux, F. (2014). Liberté individuelle et contraintes matérielles : une approche conceptuelle de la pauvreté énergétique en Belgique. [VertigO] *La revue électronique en sciences de l'environnement*, 14(3). <http://vertigo.revues.org/15617>.
- Furtos, J. (2009a). *De la précarité à l'auto-exclusion*. Paris: Éditions Rue d'ULM.
- Furtos, J. (2009b). Quelques aspects de la santé mentale concernant l'habitat dans l'accompagnement des personnes précaires. *Vulnérabilités*. Available at: <http://www.maisonmedicale.org/Quelques-aspects-de-la-sante.html>.
- Furtos, J. (2013). *Habiter n'est pas avoir un logement : approche clinique et pratique*, transcription de l'intervention du Dr. Jean Furtos à la Conférence SMES-Europa: "Home-less & Home-First".
- Godbout, J. (2003). *Le don, la dette et l'identité*. Paris: La Découverte/M.A.U.S.S.
- Grevisse, F. and Hubert, H. (2015). *Mettre de l'énergie dans le social – le métier d'accompagnateur énergie*. [online] Fdss.be. Available at: <https://www.fdess.be/fr/publication/les-cahiers-de-la-recherche-action-hors-serie/>.
- Habermas, J. (1987). *The Theory of Communicative Action. Vol. II: Lifeworld and System*, T. McCarthy (trans.). Boston: Beacon.
- Hamilton, C. (2010). *Requiem for a species: why we resist the truth about climate change*. Sydney: Allen & Unwin.
- Harrington, B., Heyman, B., Merleau-Ponty, N., Stockton, H., Ritchie, N. and Heyman, A. (2005). Keeping warm and staying well: findings from the qualitative arm of the Warm Homes Project. *Health and Social Care in the Community*, 13(3), pp. 259–267.
- Héber-Suffrin, C. (2011). Les Réseaux d'échanges réciproques de savoirs : Une véritable démarche formatrice. *Empan*, 81(1), pp. 36–42.
- Heilbrunn, B. (2015). *La consommation et ses sociologies*. Paris: Armand Colin (3rd edition).
- Hibou, B. (dir.) (2013). *La bureaucratisation néolibérale*. Paris: La Découverte.

- Hills, J. (2011). *Fuel poverty: the problem and its measurement. Interim report of the Fuel Poverty Review. Interim report of the Fuel Poverty Review*. London: Centre for Analysis of Social Exclusion.
- Hills, J. (2012). *Getting the measure of fuel poverty. Final report of the fuel poverty review*. London: Department of Energy and Climate Change.
- Hirsch, M. (2014). *Cela devient cher d'être pauvre*. Paris: Éd° Points.
- Hoggart R. (1957). *The uses of literacy: Aspects of working class life, with special references to publications and entertainments*. London: Chatto and Windus.
- Hubert, H., Serré, A. and Vlerninckx, J. (2015). *Les réalités de l'usager*. [online] Fdss.be. Available at: <https://www.fdess.be/fr/publication/les-realites-de-lusager-2015/>.
- Huybrechs, F., Meyer, S. and Vranken, J. (2011). *Energiearmoede in België*. [online] Dev.ulb.ac.be. Available at: [http://dev.ulb.ac.be/ceese/CEESE/documents/Energiearmoede in België finaal verslag.pdf](http://dev.ulb.ac.be/ceese/CEESE/documents/Energiearmoede%20in%20Belgie%20finaal%20verslag.pdf). *La précarité énergétique en Belgique*. [online] Dev.ulb.ac.be. Available at: <http://dev.ulb.ac.be/ceese/CEESE/fr/projet.php?menu=1&categorie=14&projet=124>.
- Jonas, H. (1984). *The Imperative of Responsibility. In Search of Ethics for the Technological Age*, transl. by H. Jonas and D. Herr, University of Chicago Press. (Translation of Das Prinzip Verantwortung 1979).
- Kaufmann, J.-C. (2011). *L'entretien compréhensif*. Paris: A. Collin.
- Ladsous, J. (2008). Habiter. *VST - Vie sociale et traitements*, 97(1), p.9.
- Lahaye, W., Sibeni, A. and Bartiaux, F. (2016). Leven in energiekwetsbaarheid: voortdurend hoofdrekenen en beperkte mogelijkheden. In: *Armoede en Sociale Uitsluiting, Jaarboek 2016, Blik op energiearmoede*, S. Oosterlynck, P. Raeymaeckers, J. Coene, B. Delbeke, P. Debruyne & T. Ghys (Eds), Antwerpen: OASeS. pp. 79–97.
- Le Bossé, J. (2012). *Sortir de l'impuissance : Invitation à soutenir le développement du pouvoir d'agir des personnes et des collectivités. Tome 1 : Fondements et cadres conceptuels*. Québec: Éditions ARDIS.
- Liddell, C. and Morris, C. (2010). Fuel poverty and human health: A review of recent evidence. *Energy Policy*, 38(6), pp. 2987–2997.
- Maresca, B. and Lacombe, S. (2015). À la rencontre de la précarité énergétique : un éclairage. In: *La Construction du chez-soi dans la transition énergétique. Entre conceptions de la performance et pratiques habitants*, C. Drozd, I. Requena Riuz, K. Mahé & D. Siret (dirs.) Nantes: Ensan, pp. 49–56.
- Marissal, P., May, X. and Lombillo, D. (2013). *Pauvreté rurale et urbaine - Stedelijke en plattelandsarmoede*. [online] belspo. Available at: https://www.belspo.be/belspo/organisation/Publ/pub_ostc/agora/ragKK152_2.pdf.
- McKendrick, J., Cunningham-Burley, S. and Backett-Milburn, K. (2003). *Life in low income families in Scotland*. Edinburgh: Scottish executive Social Research.
- Méhauten, L., Depauw, J., Franssen, A. and Driessens, K. (2015). Le projet individualisé d'intégration sociale. Recherche évaluative et prospective au sein des CPAS belges. Available at: https://www.mi-is.be/sites/default/files/documents/piis_rapport.pdf.
- Meyer, S., Laurence, H., Bart, D., Middlemiss, L. and Maréchal, K. (2018). Capturing the multifaceted nature of energy poverty: Lessons from Belgium. *Energy Research & Social Science*, 40, pp. 273–283.
- Middlemiss, L. and Gillard, R. (2015). Fuel poverty from the bottom-up: Characterising household energy vulnerability through the lived experience of the fuel poor. *Energy Research & Social Science*, 6, pp. 146–154.
- Moore, R. (2012). Definitions of fuel poverty: Implications for policy. *Energy Policy*, 49, pp. 19–26.

- Nicaise, I. and Schockaert, I. (2014). The hard to reach among the poor in Europe: Lessons from Eurostat's EU-SILC survey in Belgium. In: *Hard-to-Survey Populations*, R. Tourangeau, B. Edwards, T. Johnson, K. Wolter, & N. Bates (Eds.), Cambridge: Cambridge University Press, pp. 1246–1279.
- Nussbaum, M.C. (2000). *Women and human development: the capabilities approach*. Cambridge: Cambridge University Press.
- Nussbaum, M.C. and Sen, A. (1993). *The quality of life*. Oxford: Oxford University Press, and New York: Clarendon Press.
- Olivier de Sardan, J.-P. (1995). La politique du terrain. *Enquête*, (1), pp. 71–109.
- O'Sullivan, K. (2009). "Gee my account is in credit!" *Qualitative component of the Warm Homes Pilot Study*. [online] Ourarchive.otago.ac.nz. Available at: <http://ourarchive.otago.ac.nz/handle/10523/367>.
- Paulhan, I. (1992). Le concept de coping. *L'année psychologique*, 92(4), pp. 545–557.
- Sen, A. (1999). *Development as freedom*. Oxford: Oxford University Press.
- Sen, A. (2009). *The idea of justice*. London: Penguin Books.
- Serré, A. and Vleminckx, J. (2015). *Les représentations du métier d'assistant social*. [online] Fdss.be. Available at: <https://www.fdss.be/fr/publication/les-representations-du-metier-dassistant-social-2015/>.
- Spradley, J.P. (1979). *The Ethnographic Interview*. California: Wadsworth.
- Tashakkori, A. and Teddlie, C. (1990). *SAGE Handbook of Mixed Methods in Social & Behavioral Research*, 2nd Edition. Thousand Oaks, CA: Sage.
- Thomson, H. and Snell, C. (2013). Quantifying the prevalence of fuel poverty across the European Union. *Energy Policy*, 52, pp. 563–572.
- Thomson, H., Snell, C. and Liddell, C. (2016). Fuel poverty in the European Union: a concept in need of definition? *People, Place and Policy Online*, 10(1), pp. 5–24.
- Thomson, H., Snell C. and Bouzarovski, S. (2017). Health, well-being and energy poverty in Europe: a comparative study of 32 European countries. *Int. J. of Environ. Res. Public Health*, 14, pp. 584–604.
- United Nations General Assembly (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. A/RES/70/1. [online] un.org. Available at: https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.
- Van Campenhoutd, L., Chaumont, J.-M. and Franssen, A. (2005). *La méthode d'analyse en groupe - Applications aux phénomènes sociaux*. Paris: Dunod.
- Verhaeghe, P.P., Coenen, A., Demart, S., Van der Bracht, K. and Van de Putte, B. (2017). *Discrimibrux - Discriminatie door vastgoedmakelaars op de private huurwoningmarkt van het Brussels Hoofdstedelijk Gewest*. Gent: Vakgroep Sociologie, Universiteit Gent.
- Vleminckx, J. and Serré, A. (2015). *Construction du lien et temporalités de la relation d'aide*. [online] Fdss.be. Available at: <https://www.fdss.be/fr/publication/construction-du-lien-et-temporalites-de-la-relation-daide-2015/>.
- Wagener, M. (2013). *Trajectoires de monoparentalité à Bruxelles : les femmes face aux épreuves de la parentalité*. [online] Hdl.handle.net. Available at: <http://hdl.handle.net/2078.1/134855>.
- Walker, G. and Day, R. (2012). Fuel poverty as injustice: integrating distribution, recognition and procedure in the struggle for affordable warmth. *Energy Policy*, 49, pp. 69–75.
- Wilkinson, P., Landon, M., Armstrong, B., Stevenson, S., Pattenden, S., McKee, M. and Fletcher, T. (2001). *Cold comfort. The social and environmental determinants of excess winter deaths in England, 1986-1996*. Bristol: The Policy Press and the Joseph Rowntree Foundation.
- Wright, F. (2004). Old and Cold: Older People and Policies Failing to Address Fuel Poverty. *Social Policy and Administration*, 38(5), pp. 488–503.

PART 3: DISSEMINATION AND VALORISATION

11. FINAL DISSEMINATION ACTIVITIES TOWARDS SOCIAL WORKERS

Bart Delbeke, Anne Baudaux, Françoise Fournier

Three main activities were organised to disseminate the results of the research to field actors, one in each region.

1. SEMINAR ORGANISED BY THE UNIVERSITY OF ANTWERP

1.1 Aims and context

On June the 1st, 2017, a seminar for social workers and councillors was organised, in collaboration with the BIZ network Antwerp (<http://budgetinzicht.be/biz-antwerpen/>). This cooperative network of Public Social Welfare Centres, the CAW (Centre for General Well-being) and poverty organisations, aims to avoid debt. It hosts thematic meetings a few times a year and one of this year's topics was Energy. The goal was three-fold: to present the results of the BELSPO research (especially to the social workers that helped finding respondents for the interviews), to inform the participants about the procedures and possible interventions in case of energy difficulties and to hear the experiences and worries of the social workers.

1.2 Participants

More than 50 participants, among them social workers, councillors, heads of service and others, were present. The majority came from Antwerp city based organisations and about one third came from the Province.

1.3 Presentations

Four presentations were given and after each one there was room for questions and discussion.

- Quantitative and qualitative results of the Belspo research (*Bart Delbeke*)
- Introduction in the Energy landscape (*Sofie Lauwaert*)
- The mediation of debts and preventive actions (*Kristine Landuyt*)
- Social Energy Policy (*Roel Vermeiren*)

The detailed programme (in Dutch) may be found here: http://www.bizregioantwerpen.be/mc-events/studiedag-energie-1-juni-2017/?mc_id=487.

1.4 Reactions and feedbacks

More than half of the participants sent their feedback afterwards. Though the opinions were sometimes contradictory (too long, too short, too difficult, too easy, more theory or more practice...) in general, the evaluation was very positive. With a median score of 8/10, it was judged 'very useful', it 'could be used in the daily practice' and it helped them 'finding their way' to other organisations or experts.

It might be better to focus on the limited critical voices (during the sessions and afterwards in the feedback), as lessons could be learned from them. Some wanted for instance more practical examples that could be used in their job. The solutions that were presented by governmental bodies were not always realistic. The shortage of social housing was mentioned.

One person suggested it would have been better to give the participants the opportunity to send in their questions in advance and to deal with them during the presentations. He preferred small debating tables rather than lectures. The great majority however thought there was enough room for questions and discussion. Also, during the day or afterwards, the possibility was offered to write down (problematic) cases of the daily practice in which social workers got stuck and put it (anonymously) in a box. Only one person made use of this possibility. Still it is an interesting suggestion for future workshops.

2. PRESENTATION MADE IN THE BRUSSELS REGION

2.1 Aims and context

At the behest of the Vigilance Network, a social workers' group gathering once a month to discuss domestic energy access for everyone, the researcher for the Brussels Region made a presentation about the study's results. The presentation took place during the 20th February 2018's meeting in Brussels, at its usual place.

2.2 Participants

33 persons attended the meeting: 7 Public Centres for Social Action from the Brussels Region and 7 local associations were represented.

2.3 Presentation

The meetings usually take 2 hours. The presentation lasted 45 minutes, and after it, word was given to the audience for questions and discussion.

The presentation had the following outline:

1) Introduction

2) A few analysis elements:

- The notion of home/household ('foyer' in French)
- Representations and power relationships: landlords and social help
- Use of rights: recognition and individualization of responsibility

3) Conclusion and debate opening

2.4 Reactions and feedbacks

The idea that it was positive to talk about energy poverty otherwise then with number was expressed. The presentation generated many reactions and interrogations.

Several interesting questions were asked: is the way things are handled in Brussels, is there a more appropriate way to tackle energy poverty (compared to the three other Regions)? Is bringing domestic energy debts in front of a Judge a good solution? Should we automatize access to social rights (such as special energy tariff)? As energy poverty is also a matter of income, could a certain amount of free KWh (energy unit) be a good idea? What can social worker do to bring people to Public Centres for Social Action/ask for help?

The social workers present at the meeting wondered, in reaction to the presentation, about their possible role in aggravating people's situation by their attitude and by enforcing some procedures. They were also concerned about what was going to be done with the results: they suggested bringing it to authorities and politicians. Another suggestion was to organize training for judges dealing with energy issues (one of the field observations was that they do not know a lot about energy regulation and technical specificities of this matter). A person working closely with those judges said they would not be interested and/or would not have the time for that kind of training.

Some persons in the audience found the non-take up situations really hard to understand. Others were concerned about the question of social recognition and the difficulty to give back when one is in a position of receiving help. The debate among social workers, in comparing personal experiments and impression, was also fruitful.

3. TRAINING DAY ORGANISED BY THE UNIVERSITY OF MONS

3.1 Aims and context

The University of Mons organized a training day for social workers and managers of social public institutions on May the 24th, 2018. The theme of the day was not only to inform about the results the 2GENDEERS' study but also to introduce different action researches and innovative interventions related to the conclusions of our BELSPO's research. These interventions are mainly related to the power for acting in contexts of energy poverty. The presentation of these innovative projects are based on active social practices for a sustainable educational development of people living in poverty.

This goal was defined as an important issue emerging from the research (specifically when meeting social actors) and on which the University of Mons decided to focus more particularly, in agreement with the social actors met throughout the research. The aim was to highlight the field initiatives useful in the fight against energy poverty. Good practices that the University of Mons wanted to echo not only at the level of the study, but also to a wide audience.

3.2 Participants

Sixty-five people registered for the training day. Among them, representatives of decision-making institutions such as, for example, the Cabinet of the Walloon Minister for Energy Jean-Luc Crucke, the Walloon Network for the Fight against Poverty, the Federation of Walloon CPAS or the Energy Regulator in the Brussels region. The majority of them came mainly from the provinces of Hainaut and Namur, some of the Brussels region.

3.3 Presentations

Seven presentations were given, each time followed by a large discussion:

- 2GENDEERS research on energy poverty, commissioned by the Science Policy Office BELSPO - Françoise Fournier, Research Assistant at CeRIS, UMONS.
- Study on the implementation of communicating meters, carried out in partnership by CERIS (UMONS) and ORES, commissioned by the DG04 of the Walloon Region - Charles Glineur, Research Assistant at CeRIS, UMONS.
- Development of the Power to Act for People and Communities, a new methodology available to social workers of Walloon CPAS - Bernard Dutrieux, asbl Union of Cities and Towns of Wallonia, Head of Department, Training Center of the Federation of CPAS.
- Eco-Watchers project, an adaptation of the Reciprocal Exchange of Knowledge Networks to combat energy poverty - Stéphanie de Tiège, Project Manager at the non-profit organization Empreintes - CRIE de Namur, initiator and co-creator of the project.
- The local social Cohesion Observatory of the CPAS in Charleroi, or how territorial intelligence can improve the social watchfulness in important social issues - Giusto Maniscalchi, Head of the Observatory.
- Energy-Housing Platform of the City and the CPAS of Soignies, a unique platform of integrated services as a help for citizens - Hubert Dubois, President of the CPAS of Soignies.

- Democratic School of the Orneau, or how an innovative teaching can give back the power to act - Romain Gauthier, Public Relations Officer of the Democratic School of the Orneau.

3.4 Reactions and feedbacks

The evaluation of the day was very positive among the participants. Field initiatives highlighted in the study were welcomed. On the one hand, the participants were pleased that their work was highlighted by the academic sector and, on the other hand, they appreciated the concrete side of the observations. They noticed that the recommendations from academic studies were more realistic when trying to develop pragmatic issues related to these recommendations and making efforts in translating these recommendations into innovative initiatives as presented during the training day.

Participants expressed interest in having this kind of bottom-up studies integrated in the academic landscape.

Many requests have been made for the speakers' PowerPoint to be posted on the university's website, in order to be able to communicate the content within their professional environment. Indeed, good practices are sought by any social actor wishing to find solutions to energy poverty. This training day shows that the dissemination of the 2GENDERS' results is important to encourage the production of initiative actions to encourage and support the synergies between researchers and social workers.

4. CONCLUSION

The three events showed the interest of social workers for both the topic and the academic approach that was proposed. Different ways to interact with the audience were used, for the most part successfully, and associations' expertise was also recognised.

12. PUBLICATIONS MADE DURING THIS RESEARCH PROJECT

- Bartiaux F., Vandeschrick C., Moezzi M., Frogneux N. (2018). Energy justice, unequal access to affordable warmth, and capability deprivation: a quantitative analysis for Belgium. *Applied Energy, Special Issue: 'Low-carbon energy systems and energy justice'*, 225C, 1219–1233. DOI: <https://doi.org/10.1016/j.apenergy.2018.04.113>
- Bartiaux, F., Van der Linden, M., Debast, N. & Baudaux, A. (2015a). La pauvreté énergétique. In: Lahaye, W., Pannecoucke, I., Vranken, J., Van Rossem, R. (éds.) *Pauvreté en Belgique – Annuaire 2015*. Gent: Academia Press, pp. 93–111.
- Bartiaux, F., Van der Linden, M., Debast, N. & Baudaux, A. (2015b). Energiearmoede. In: Pannecoucke, I., Lahaye, W., Vranken, J., Van Rossem, R. (eds.) *Armoede in België – Jaarboek 2015*. Gent: Academia Press, pp. 93–111.
- Baudaux, A. (2014). Energy Poverty in Brussels: First Results of a Qualitative Survey. *Queen's Political Review, Special Edition: 'Fuel Poverty'*, II (2), 88–99.
- Coene, J. (2018). Koude woningen, koude overheid, *Samenleving en Politiek*, 25(4): 41-47.
- Coene, J. & Delbeke, B. (2016). Energie-armoede in cijfers. In: Oosterlynck, S., Raeymaeckers, P., Coene, J., Delbeke, B., Debruyne, P., & Ghys, T. (eds.) *Armoede en Sociale Uitsluiting. Jaarboek 2016: een blik op energie-armoede*. Antwerpen: OASeS, pp.31-57.
- Coene, J., Delbeke, B., Ghys, T., Oosterlynck, S. & Raeymaeckers, P. (2016). Het energie-armoedebeleid in vogelvlucht. In: Oosterlynck, S., Raeymaeckers, P., Coene, J., Delbeke, B., Debruyne, P., & Ghys, T. (eds.) *Armoede en Sociale Uitsluiting. Jaarboek 2016: een blik op energie-armoede*. Antwerpen: OASeS, pp.61-76.
- Coene, J., Ghys, T., Oosterlynck, S. & Raeymaeckers, P. (2016). Inleiding: Energie-armoede structureel bestrijden, In: Oosterlynck, S., Raeymaeckers, P., Coene, J., Delbeke, B., Debruyne, P., & Ghys, T. (eds.) *Armoede en Sociale Uitsluiting. Jaarboek 2016: een blik op energie-armoede*. Antwerpen: OASeS, pp.11-24.
- Delbeke, B. & Coene, J. (2016). Energie-armoede vergt een gerichte aanpak, *De Gids op Maatschappelijk Gebied*, 107(10): 31-35.
- Delbeke, B. & Coene, J. (2018). Wat is energie-armoede: een definitie en stand van zaken, In: Goedemé et al. (eds.) *Armoede, energie en wonen*. Antwerpen: USAB, pp.13-26.
- Frogneux N., Luyckx, C. & Bartiaux, F. (2014). Liberté individuelle et contraintes matérielles : une approche conceptuelle de la pauvreté énergétique en Belgique. *[VertigO] La revue électronique en sciences de l'environnement*, 14(3). <http://vertigo.revues.org/15617>.
- Goedemé, T., Coene, J. & Hubeau, B. (2018). Inleiding: energie en armoede, In: Goedemé et al. (eds.) *Armoede, energie en wonen*. Antwerpen: USAB, pp.7-12.
- Lahaye, W., Sibeni, A. & Bartiaux, F. (2016). Leven in energiekwetsbaarheid: voortdurend hoofdrekenen en beperkte mogelijkheden. In: Oosterlynck, S., Raeymaeckers, P., Coene, J., Delbeke, B., Debruyne, P., & Ghys, T. (eds.) *Armoede en Sociale Uitsluiting, Jaarboek 2016, Blik op energiearmoede*, Antwerpen: OASeS, pp. 79-97.
- Oosterlynck, S., Raeymaeckers, P., Coene, J., Delbeke, B., Debruyne, P., & Ghys, T. (eds.) (2016). *Armoede en Sociale Uitsluiting. Jaarboek 2016: een blik op energie-armoede*. Antwerpen: OASeS.
- Sibeni A., Lahaye W., Bartiaux F. (2018). De l'inconfort aux contraintes matérielles, du repli domestique aux pratiques adaptatives : vécus en précarité énergétique dans une région de la Wallonie. In : Ortar, N., & Subrémon, H. (dir.) *L'atelier des usages de l'énergie. Anthropologie d'une transition en cours*, Paris : éditions Pétra, pp. 213-235.

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