



Brief presentation of the 2GENDERS project

**Françoise Bartiaux
FNRS et UCL, Louvain-la-Neuve**

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2GENDERS research project

- **2GENDERS** : **G**eneration and **G**ender
Energy **D**eprivation: **R**ealities and **S**ocial
policies
- Funded in 2013-2017 by BELSPO
- 4 Partners:
 - UCL (coord.): F. Bartiaux, C. Vandeschrick,
A. Baudaux, C. Luyckx, N. Frogneux
 - U of Antwerp: S. Oosterlynck, B. Delbeke
 - U of Mons: W. Lahaye, P. Jamouille, A. Sibenini
 - U of Birmingham (UK): R. Day

2GENDERS project (cont'd)

5 WPs:

1. Coordination with stakeholders, **policy** recommendations
2. Identification of the **populations** in energy poverty in Belgium (Quantitative analyses)
3. Energy poverty and **other vulnerabilities**: practices and meanings (Quantitative and qualitative analyses)
4. **Energy justice** for a + cohesive society
5. **Dissemination activities** (policy briefs, training for social workers)

**Energy justice,
unequal access to
affordable warmth,
and capability
deprivation:
a quantitative
analysis for Belgium**

**Françoise Bartiaux,
Christophe
Vandeschrick,
Nathalie Frogneux,
UCL, Belgium**

Outline

- A conceptual approach
 - Towards a unified definition of energy poverty?
 - The energy-justice paradigm
 - The capability concept
 - Poverty, capability deprivation
 - Energy poverty: a working definition
- Data & methods
- Results: energy poverty in Belgium and associated (un-)capabilities
- First conclusions

Towards a unified definition of energy poverty?

- Origin: fuel poverty (Boardman, 1991)
 - Fuel / energy poverty / energy “precariousness”
 - For Bouzarovski and Petrova (2015: 37) their review of definitions “hint at the theoretical obsolescence of the notion of ‘fuel poverty’, even if the concept is widely recognized in policy and scientific circles”. They argue instead for the concept of “energy service poverty”.

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- **Definitions used also depends on the data available or produced!**

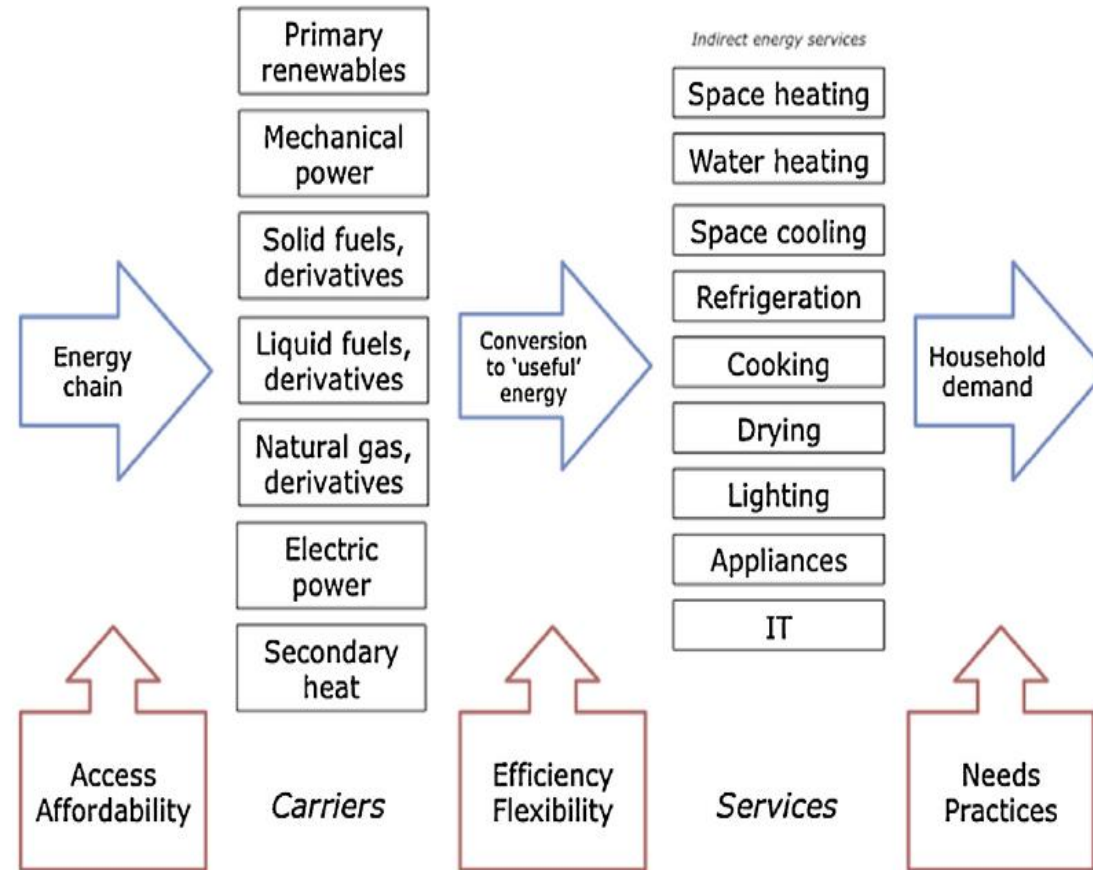


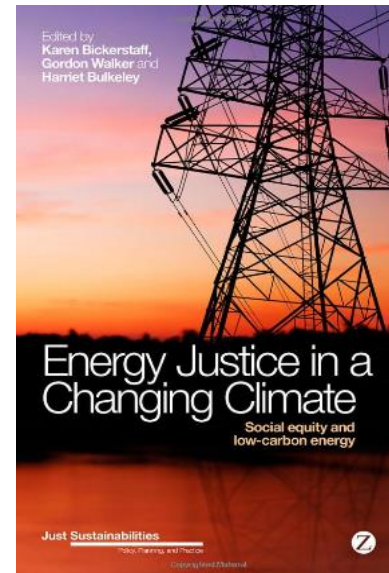
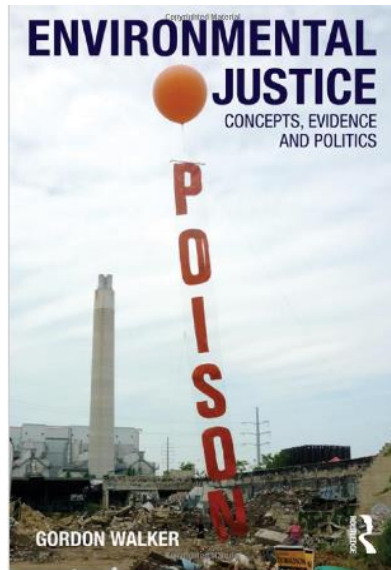
Fig. 1. Dimensions influencing the delivery of energy services to the home, and the emergence of domestic energy deprivation.

But 'needs' is hold as a concept depicting an objective reality

The energy-justice paradigm

■ Sources

- Walker (2012), Walker & Day (2012)
- Bickerstaff, Walker & Bulkeley (2013)
- Sovacool & Dworkin (2015), Jenkins et al. (2016) and others...



The energy-justice paradigm

- **Origin: environmental (in-)justice**
 - Spatially and socially uneven locations of environmental 'goods' or 'bads' (e.g. waste, flooding, pollution, green spaces, climate-change impacts)
 - Climate-change impacts and costs of climate-change mitigation
- **Energy (in-)justice** during the transition to a low carbon society, between and within countries

The energy-justice paradigm

- 3 dimensions
 - Distribution
 - Procedure
 - Recognition
- **Empirical & qualitative application:**
Bartiaux F., Schmidt L., Horta A., & Correia A. (2016). Social diffusion of energy-related practices and representations – Patterns and policies in Portugal and Belgium. *Energy Policy*, 88C, 413–421.

Capabilities

(A. Sen, M. Nussbaum)

Criteria of capability: the possibility to live a **good life for reasonable projects of life** (access to a heated home, to be educated, to develop social life, to take part to political decisions, to be recognized, access to culture...).

→ it is necessary to **enlarge the sources of criteria for a good life**

Specificity of this approach

1. **A non instrumental logic (not the one of means and goals)**
 - Freedom is enacted, it is not a mean for something else
2. **Subjective perspective:** capabilities are defined by the persons themselves and their context of life.
 - capabilities are not defined by guidelines or norms

The capability concept (cont'd)

"Substantial" Capabilities of M. Nussbaum (universal)

1. life of normal length;
2. bodily health;
3. bodily integrity;
4. senses, imagination, and thought;
5. emotions;
6. practical reason;
7. affiliation;
8. other species;
9. play;
10. control over one's environment on both a political sense and a material one.

Source: Nussbaum, M. C. (2000). *Women and human development: the capabilities approach*. Cambridge: Cambridge University Press, pp. 78-80.

Capabilities and energy poverty

- To struggle against energy poverty = to enhance real capabilities of individuals for reasonable projects of life.
- // energy-justice paradigm
 - Resources (distribution)
 - Political participation (procedure)
 - Recognition

Capabilities and energy poverty

- Consequence: a comparison between several groups, from energy poor to energy rich households
 - Energy poor
 - Self-perceived poor with a social allowance
 - Other self-perceived poor
 - Energy vulnerable
 - Others (energy richest)

A working definition of energy poverty

- From European Survey on Income and Living Conditions (**EU-SILC**) databases, for their comparison of energy poverty prevalence in European countries, Thomson and Snell (2013) use:
 - (1) 'Do you have affordability problems to keep the home adequately warm?',
 - (2) 'Do you have arrears on utility bills?',
 - (3) 'Do you have a leaking roof, damp walls or rotten windows

Other definitions of energy poverty

- From European Survey on Income and Living Conditions (**EU-SILC**) databases, Delbeke and Meyer (2015) define 3 concepts:
 - (1) Measured energy poverty: devote too high a proportion of their disposable income on expenditure for energy
 - (2) Hidden energy poverty: potentially restricted spending, given their low energy expenditure compared with that of households living in a similar situation
 - (3) Perceived energy poverty: experienced financial difficulties in heating their homes correctly

The Generation and Gender Programme (GGP)

[Home](#)[Data](#)[Materials](#)[About](#)

Online Data Analysis



Contextual Database



Welcome to the GGP

The **GGP** is a Longitudinal Survey of 18-79 year olds in **19 countries** that aims to improve our understanding of the various factors -including public policy and programme interventions - which affect the relationships between parents and children (generations) and between partners (gender). A broad array of topics including fertility, partnership, the transition to adulthood, economic activity, care duties and attitudes are covered by the **survey**. The accompanying **contextual database (CDB)** holds data on: legal norms and regulations, social norms, measures of welfare state policies and institutions as well as general economic and cultural indicators. You can also access the data via our **Online Analysis** tool



<http://www.ggp-i.org/bhbm>

Participating countries

- **Currently Wave 1 data are available for 16 countries:**
Australia, Austria, Belgium, Bulgaria, Estonia, France, Georgia, Germany, Hungary, Italy, Lithuania, Netherlands, Norway, Poland, Romania, Russian Federation
- **Currently Wave 2 data are available for 6 countries:**
Bulgaria, France, Georgia, Germany, Hungary and the Netherlands

2 variables to build an EP variable

Can afford keeping your home adequately warm?	Unable to pay utility bills (electricity, water, gas, ...)?	
	Yes	No
Yes	<u>7,8% (542)</u>	83,7% (5854)
No	1,5% (102)	<u>7,1% (494)</u>

$$\chi^2 = 48,67 \text{ (p=0,000)}$$

IN5c: 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...?

IN6c: 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 them?

A 3rd variable to build an EP variable

Thinking of your household's total income, is your household able to make ends meet (IN4)	Arrears: yes	Adequat. warm: no	Both	None
Very difficult	119	62	64	169
Difficult	109	88	20	497
Rather difficult	122	122	154	1021
Rather easy	102	109	1	1984
Easy	73	96	2	1732
Very easy	19	29	0	436

At least 10,3% of HH in energy poverty

5 groups

5 GROUPS

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln	Rich
% with social allowance (at least one, including allowance for jobless persons, minimum social income...) in the household	16,1%	100,0%	0,0%	4,6%	3,3%

By
construction

Summary of capabilities: To be able to live as one wants to

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln	Rich
To feel often or (almost) always <u>depressed</u>	20,5%	20,3%	8,7%	(5,5%)	3,6%
To feel often or (almost) always <u>lonely</u>	19,0%	23,3%	11,8%	(4,2%)	3,6%
To feel often or (almost) always <u>sad</u>	21,1%	21,4%	11,5%	(4,6%)	4,6%
To have the feeling that <u>one's life is a failure</u>	14,4%	(10,8%)	5,3%	(4,2%)	2,2%
Mean	18,8%	18,9%	9,3%	4,7%	3,5%

Nussbaum's “substantial” capabilities

Capability

Control over one's environment (property)

Play (recreational activities)

Senses, imagination & thoughts (access to culture)

Health (chronic illness, handicap, nutrition)

Emotions (attachment, love, support, anxiety)

Practical reasons (perceived control)

Bodily integrity (safe neighbourhood)

Health – shelter (dwelling's characteristics)

Affiliation (social interactions)

Health

Being able to have **good health**, including reproductive health; to be **adequately nourished**; to have **adequate shelter**.

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln	Rich
In a (very) bad health in gen.	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%
There 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 every second day	34,8%	(14,5%)	5,0%	83,1%	1,6%

Health - shelter

Being able to have **good health**, including reproductive health; to be **adequately nourished**; to have **adequate shelter**.

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln.	Rich
Dwelling: too <u>small</u>	26,1%	(18,2%)	14,1%	(8,0%)	8,6%
Dwelling: too <u>dark</u>	16,3%	(15,7%)	12,1%	(12,2%)	7,9%
Dwelling: too <u>noisy</u> (street/ neighbours)	29,0%	26,4%	20,7%	17,7%	17,1%
<u>Pollution</u> or other environmental problems	25,1%	(14,6%)	12,5%	18,1%	8,8%

Bodily integrity

Being able **to move freely from place to place**; **to be secure against violent assault**, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln	Rich
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%	0,9%	0,0%	0,1%
Crime, violence or vandalism in the area	23,7%	17,6%	15,1%	16,9%	10,7%

Senses, imagination & thoughts

Being able to use the senses, **to imagine, think, and reason** -- & to do these things in a "**truly human**" way, a way informed & cultivated by an adequate education, including, but by no means limited to, literacy, basic math & scientific training. Being able to use imagination & thought in connection with experiencing & producing works. Being able to use one's mind in ways protected by guarantees of freedom of expression. Being able to have pleasurable experiences.

	Energy Poor	Poor. (allow)	Other Poor	Energy Vuln	Rich
No diploma at all	5,7%	6,9%	3,3%	1,3%	1,1%
Would like to have <u>a colour TV</u> but cannot afford it	2,4%	0,0%	0,5%	0,8%	0,0%
Would like to have an <u>internet connection</u> but cannot afford it	15,4%	15,8%	7,4%	4,2%	1,4%
<u>Lack of leisure spaces</u> like parks or playgrounds <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%
<u>Lack of services and shops</u> and (same: lack of mean of transport)	1,3%	3,1%	0,6%	0,0%	0,0%

Emotions

Being able to have **attachments to things and people outside ourselves**; to love those who love & care for us, to grieve at their absence (...). Not having one's emotional development blighted by fear & **anxiety**.

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln	Rich
Dwelling too far from family	22,2%	25,3%	14,1%	16,5%	9,5%
To lack enough support if pbm	19,3%	12,7%	12,1%	9,7%	5,3%
To have not a lot of people that I can count on completel	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	48,7%	36,1%	14,5%	84,8%	1,9%
To have felt last week (rather / very) frequent anxiety	19,7%	19,5%	9,1%	5,5%	4,1%

Practical reasons

Being able to form a conception of the good and to engage in critical reflection about **the planning of one's life.**

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln	Rich
How much control do you feel you will have over the following areas of your life in the next three years?					
Your financial situation	43,7%	34,4%	22,5%	9,0%	8,7%
Your work	47,5%	48,7%	29,6%	22,7%	17,0%
Your housing condition	33,8%	29,2%	13,8%	8,5%	6,0%
Your health	38,5%	38,5%	28,0%	18,1%	20,2%
Your family life	27,0%	20,6%	13,9%	7,8%	6,9%

Affiliation

Being able to live with and toward others, to recognize and show concern for other human beings, to engage in various forms of **social interaction**; to be able to imagine the situation of another.

	Energy Poor	Poor (allow)	Other Poor	Energy Vuln	Rich
To have a a general sense of <u>emptiness</u>	24,1%	28,9%	16,4%	8,1%	7,3%
To often feel <u>rejected</u>	13,5%	14,6%	7,5%	5,5%	2,7%
To have <u>not enough people</u> that I feel close to	14,3%	19,5%	8,8%	7,2%	5,8%
To have <u>not spoken</u> to anyone on one's experiences & feelings	37,7%	26,4%	42,8%	40,9%	37,5%
To have <u>not listened</u> to someone about his/her experiences and feelings	39,4%	28,5%	39,7%	35,3%	34,4%

Being able to laugh,
to play, to enjoy **recreational activities**

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln	Rich
Cannot afford going on <u>a one-week holiday</u> at least once a year	69,5%	69,2%	40,3%	79,7%	6,9%
Cannot afford <u>paying for an extracurricular activity</u> for a child	51,2%	30,6%	16,5%	85,3%	3,3%

Control over one's Environment

Material: Being able to hold **property** (both land and movable goods), and having property rights on an equal basis with others; having the right to seek **employment** on an equal basis with others.

	Energy Poor	Poor (soc. allow)	Other Poor	Energy Vuln	Rich
Mean number of items that the respondent would like to have but cannot afford:					
Colour TV / Phone / Car or van	0,26	0,28	0,10	0,02	0,02
White appliances: dishwasher / microwave / washing machine	0,38	0,40	0,12	0,05	0,03
PC / Internet connection	0,31	0,30	0,14	0,05	0,03

Nussbaum's “substantial” capabilities

Capability	Summary score
Control over one's environment (property)	170,9%
Play (recreational activities)	168,8%
Senses, imagination & thoughts (access to culture)	164,3%
Health (chronic illness, handicap, nutrition)	126,9%
Emotions (attachment, love, support, anxiety)	124,0%
Practical reasons (perceived control)	105,7%
Bodily integrity (safe neighbourhood)	82,9%
Health – shelter (dwelling's characteristics)	77,9%
Affiliation (social interactions)	38,0%

First conclusions

- **The energy-justice paradigm and the concept of capabilities** make it possible to uncover inequalities, spec.
 - **Material property**
 - **Access to culture & recreational activities**
- **The comparison** between energy-poor people and other social groups **make the issue of social stigma clearer** (→ issues of recognition)



A few questions on your
project

Before data processing

- Which research objectives?
- Which research questions?

Data characteristics

- **For both databases: Census and EU SILC:**

- Unit of recording: household or individual?
- Nested samples?
- Smaller common geographical/administrative unit?
- Available variables on dwelling (e.g. insulation, windows, types of vector...)?
- Available variables on household composition?

- **Other data sets to be used?**

Data processing

- Data analysis: which unit? : individual, household, geographical/administrative unit?
- Matching: which way?
 - Census → EU-SILC or
 - EU-SILC → Census



Obrigada!

◦ Francoise.Bartiaux@uclouvain.be