

COST Action 16232

European Energy Poverty: Agenda Co-Creation and Knowledge Innovation (ENGAGER 2017-2021)

#### Report on the Workshop

#### "Energy justice in a changing market"

University of Leicester / workshop hosted by Prof. Cosmo Graham

Thursday 31st May 2018

The aim of this workshop was to bring together academics working in energy law and policy from diverse disciplines and perspectives to enhance knowledge in this field. A key issue is how to deliver accessible and affordable energy supply in the context of moving towards low-carbon energy supply and a more de-centralised competitive energy market.

Although energy poverty and energy justice have been researched from a variety of different disciplinary viewpoints, there has been limited engagement with legal scholarship on energy law and regulation. This is a significant gap, as policy objectives must be implemented through legal means and may involve the active participation of regulatory bodies. Opening this dialogue will create innovative ways of thinking about the issues, both from policy and academic perspectives.

#### Ute Dubois (ISG International Business School) "ENGAGER WG1 objectives"

Within the ENGAGER COST Action, the goal of Working Group 1 is to take stock of the state of the art in energy poverty analysis. For the first year of ENGAGER, our main task will be to work on an assessment of how energy poverty is viewed and addressed both in research and in public policies of COST countries. We are planning two types of tasks. The first task is a qualitative assessment on the state of the art in energy poverty research. This assessment will be produced by the members of the ENGAGER COST Action, who will have the possibility to contribute through short articles on a particular topic on energy poverty in their country. This collection of contributions, called "EP-pedia", will be organised as an evolving tool, which can be improved and extended over time. The second task is a quantitative survey, the Energy Poverty Barometer. The goal of this Barometer will be to assess how energy



poverty is viewed and addressed in each country. The survey will be sent to various energy poverty experts of COST countries.

### <u>Prof Stefan Bouzarovski</u> (University of Manchester) "Energy Poverty and Justice: a Geographical Perspective"

Going beyond the state of the art in energy poverty research and analysis raises different challenges. A first challenge is methodological: is involves moving beyond traditional approaches which were focused on heating, on certain social groups, on the "triad" of incomes, energy costs and energy efficiency, on poverty and on certain geographical spaces. A second challenge is related to methodological innovation: there is still a considerable space for questioning traditional measures and their interrelations and using new types of indicators or research methods. A third challenge relates to the expansion of energy poverty to new policy spaces, with an increasing variety of initiatives and measures to address the drivers of energy poverty.

In that context, analysing energy poverty from a vulnerability and an injustice perspective implies taking into account the existence of systemic and political factors contributing to an unfair distribution of benefits and burdens. From a geographical perspective, this raises questions of the uneven distribution of energy vulnerability across space and of the relevant scale of analysis of the multiple "nexi" related to energy poverty.

#### Kirsten Jenkins (University of Brighton) "Concepts of Energy Justice"

Approaches to the topics of "energy justice" and "energy poverty" are various, and often imprecise with the terminology they use. Whether it is ethics, fairness, equality, democracy or justice itself, we need to be mindful of the true meaning of the terms we are using. This comes, in part, because of their root in legal scholarship; a field in which energy justice and enegy poverty thinking is only beginning to emerge. Looking forward to continued growth in this area, this presentation briefly identifies a number of emergent challenges that we must consider within both disciplines; as examples, are we working towards proactive or retributive outcomes? Within whose jurisdiction? At what scale? Using what procedures? This presentation does so in order to both define conceptual boundaries and outline "real-world" ones.

# Françoise Bartiaux (Université Catholique de Louvain) "Unequal access to affordable warmth and differentiated levels of capability deprivation: concepts, methods, and evidence for Belgium"

A conceptual and quantifiable framework on energy justice and capability is proposed. It is tested with statistical analyses that are replicable in other countries that are realising survey(s) as part of the Generation and Gender Programme. Energy poverty is significantly associated with deprivation of many capabilities. Social stigma against energy poor is thus evident in many aspects of daily life. In this era of climate change, energy-justice policy should equalise capability deployment, not energy consumption.



### <u>Chris Gill (University of Glasgow) and Marine Cornelis "Vulnerable Consumers and Energy Complaints"</u>

Chris Gill and Marine Cornelis provided an introduction to the 'ESRC Just Energy' project. The project is investigating access to justice for vulnerable and energy poor consumers in Europe. The paper explained the background to the project and the concern with investigating whether the growth of Alternative Dispute Resolution (ADR) for dealing with energy problems had led to increased access to justice for consumers. The paper explained that the particular emphasis of the project was on considering whether ADR had improved access to justice for the most vulnerable and those traditionally excluded from redress. Finally, the paper set out how the project aims to make connections between procedural and substantive aspects of energy justice, the design of regulatory systems and redress systems, and questions of vulnerability and energy poverty. The project is running until September 2020. More information, news interim outputs available the project website: and are on https://esrcjustenergy.wordpress.com/

### <u>Carolyn Snell</u> (University of York) "Understanding how Vulnerable Groups engage with Energy and Energy Efficiency Measures"

In the UK, the implementation of energy efficiency measures is viewed as the main instrument to address energy poverty. The present study investigates whether this policy agenda has helped disabled people and low-income families. Qualitative interviews have been conducted with national policymakers, with stakeholders involved in policy implementation and with households who are disabled or have young children to examine how disabled people engage with energy efficiency measures and whether they meet their needs. The interviews reveal that the households in our dataset are very risk averse. Moreover, many of them have high levels of mistrust in the sector. The communication towards these households needs to be clear and the installations should recognise the specific needs of these households. This raises the question whether the private funded approach that emphasizes low cost installations suits the needs of the most vulnerable.

### Raffaele Miniaci (Università degli Studi di Brescia) "Combining Census and EPCs Data to Map Fuel Poverty in Italy: A Small Scale Experimentation"

The aim of the study is to explore the possibility to fill a gap in the Italian data useful to compute fuel poverty indicators. Most of the fuel poverty indices suggested in the literature compare (in different ways and among other things) the income of the households with the "appropriate" spending for heating, where the appropriateness depends on the characteristics of the housing conditions enjoyed by the households. Unfortunately, in Italy there is no unique data source that provides information on household characteristics (including housing conditions, income and demographics) and the energy required to keep their accommodations adequately warm. We suggest overcoming this limitation by combining data from the (public) register of the Energy Performance Certificates (EPC), the Population and Dwellings Census, and the



Survey on Income and Living Conditions (SILC) of the Households. The EPC register is an administrative archive with point geo referenced and detailed information on energy efficiency of the dwellings, but no information on their potential occupants. On the other side Census data can be geo references at small areas, provide detailed demographic information on resident individuals and share some information on their accommodation with the EPC register. Finally the SILC survey contains the same information on demographics and housing as the Census data, but can be geo referenced only at regional level. Our strategy is to use the EPC register as reference data source, and to impute to every EPC a household in the Census dataset, resident in the same small census area and whose accommodation features are as similar as possible to those of the dwelling with the EPC. Technically, we make an exercise of conditional probabilistic matching. The next step will be to (probabilistically) impute to these households an estimate of their income coming from the SILC datafile, conditioning on region of residence, demographics and housing conditions.

We have so far experimented with a province of the North East region of Italy (Treviso), considering about 20,000 EPC for 280,000 residential dwellings. Our preliminary results show that the procedure is implementable, that it appropriately takes into consideration that the stock of dwellings with EPC is remarkably different from the overall stock of accommodations, that consequently they are inhabited by households that are not representative of the overall provincial population, and that consequently extra care should per paid to use the resulting combined dataset for policy purposes.

## Maciej Sokolowski (Faculty of Law and Administration, University of Warsaw) "Policies to tackle Energy Poverty: Poland and Beyond"

The presentation reviews and discusses the various tools that are used and/or discussed to address energy poverty. Among them one may find the energy allowances for vulnerable energy consumers, defined as people who have been granted a housing allowance. Other tools (the new one) have been developed as part of the Clean Air Programme. According to that programme, energy poor people should be financed for 100% of the cost of the thermal refurbishment of their homes. As more than one million households can be the energy poor, the cost of this refurbishment is estimated around PLN 50 billion (in Poland, 12% of the population is estimated to be energy poor, however these are not the official statistics, therefore, still there is a need to conduct research on this matter). Currently, the government is analysing options to develop a comprehensive policy to ensure the protection of vulnerable people against energy poverty.

## Michael Harker and David Reader (University of East Anglia), "Regulatory Duties and Fairness in Retail Energy: Perspectives from the Regulatory Community"

This presentation explains and analyses the evolution of the UK energy regulator's statutory duties over the last 30 years, explaining the evolving role of the consumer interest, including vulnerable consumers. We present the findings of our elite interviews of members of the UK regulatory community, focusing on their views of



policies which have significant redistributive effects. Such policies raise questions of legitimacy, accountability and independence.

#### Maribel Canto-Lopez (University of Leicester) "Enforcement and Consumer Redress"

In the UK the Office of Gas and Electricity Markets (Ofgem) has implemented a change in enforcement encouraging energy companies to offer voluntary redress to (1) customers affected by their breaches on sectoral cases and to (2) charities. The government saw this option as one that would protect the interest of consumers and increase justice in energy markets requiring companies to put things right rather than simply pay a fine. The monetary value of redress since 2015/2016 represents a 100% of the volume of penalties imposed. This new enforcement strategy supports companies' legal obligations, including those of energy efficiency, while using the proceeds to compensate consumers and fund community/charitable projects that support national, regional and local energy focused initiatives. The money delivers energy advice services and home improvements. This new type of redress saves government and companies resources; makes companies more aware of how their breaches affect society and protects energy consumers.

# <u>Christophe Krolik</u> (Université de Laval), "Approaches to Energy Poverty in Canada and France"

The purpose of this presentation was to compare how France and Quebec energy law integrate the determinants of energy poverty, more specifically (1) the cost of energy, (2) the energy efficiency of the dwelling and (3) the household income. Concerning the first determinant, Quebec and France legislation are similar concerning the measures applicable to all household consumers but are very different concerning the specifics measures for energy-poor people. In fact, we can see that the Quebec law is significantly less developed than France in this matter, as it includes no definition, no strategy and no measures on energy poverty, except for one specific payment agreement. Concerning the second determinant, the energy efficiency of the dwelling, France energy law is, once again, more advanced than Quebec's. Unlike France, Quebec has no mandatory energy assessment or label and has no « nearly zeroenergy buildings » target. There is also only one financial program for energy-people in Quebec, while in France more than 20% of the energy saving certificates are dedicated to energy-poor people. Finally, concerning the existence of a « right to electricity », we can say that France has as a potential protection of energy access through constitutional rights, while in Quebec there is legal challenge under the Canadian Charter of Rights and Freedoms.

### Ana Parausic (University of Belgrade) "Energy Poverty research perspectives in Serbia"

Energy poverty and related concepts (fuel poverty, energy injustice, energy insecurity, energy deprivation) were not the topics of interest in the academic circles in Serbia, especially in social science. Some insights could be gained from projects conducted by national, international organizations, NGO-s and other agencies. The data



presented in this presentation are derived from Statistical Office of the Republic of Serbia and SILC1 2013 and 2014. There are several indicators for EP assessment in Serbia: personal consumption of households, multiple deprivation in housing, possibility to warm the home to a socially and materially acceptable level, condensation and mold in the apartment, possibility to pay or delay payment of communal services, adequate lighting of the apartment. In comparison to other European countries, Serbia is facing significant energy poverty difficulties, and the situation is worsening. Therefore, there is a need for comprehensive and systematic research. We propose several security perspectives to tackle the issue of EP in Serbia: urban security, human security and energy security.

#### **Break-out session**

Topic 1: Energy access and the "right to energy" in COST countries

 Task 1: List the main obstacles to a just / an equal access to affordable energy in COST countries

We started with the topic of energy access and the right to energy. We discussed whether it should be a right to energy or to energy services because that's what the households need, they need a warm home, they don't literally need the oil. We questioned whether the right to energy is effective. The bottom line was that it is the first step because it provides recognition, but we definitely need obligations to enforce it. Then, we discussed five main obstacles:

- the legal issue (if there is no right and no obligation),
- infrastructure as an obstacle to equal access,
- imaginaries, like politicians who have poor perceptions of energy poor households and stigmatise them as households wasting energy, and so they are not willing to help those badly behaving people,
- lack of information but also fantasies/imaginaries about the perfect consumer who knows everything (which is never the case),
- economic aspects.

Finally, we discussed the difficulty of knowing whether we do the right thing. Technical solutions can be implemented, or measures be promoted to tackle energy poverty, without knowing their side effects or the situations that they can lock people into.

<sup>&</sup>lt;sup>1</sup> The main goal of Survey on Income and Living Conditions (SILC) is to collect comparable data on income, poverty, social exclusion and living conditions.



Topic 2: Vulnerability: What protections of consumers on the energy markets and how are the vulnerable consumers or energy poor people protected?

 Task 2: List the current knowledge gaps regarding the most (energy) vulnerable populations

First, we discussed how vulnerability is actually determined. We found that there can be differences between objective and subjective vulnerability. We can talk about "objective" vulnerability when there are strict criteria on which vulnerability is measured, which "subjective" vulnerability is self-reported. There are situations where someone is objectively energy poor but is not feeling energy poor.

A second question is how we approach, or measure needs of vulnerable populations. Then we focused on the different population groups that can be vulnerable. These include:

- People living in private rented apartments.
- People living in urban areas. Urban energy poverty is more researched than rural energy poverty.
- Illiterate population.
- Informal settlers (squats): as they are illegal, it is impossible to provide them with energy. These populations have to be moved, but the question about their access to energy in new settlements remains.
- Non-domestic consumers (small businesses that can't afford to pay bills).
- People with mental health problems, people with disabilities.

Then we discussed about the role of actors like social services, NGOs, companies, and about procedures and regulations that can affect people's energy vulnerability.

• Task 3: Your recommendation on topics 1 & 2: What would be required to better protect the energy vulnerable and/or ensure a better access to affordable energy?

Granting the right to energy is a "must" in national legislations. This right would help in acquiring what is described in the Millenium Development Goals as one of the rights of the people.

These principles are also included in the principles of the European Union regarding the Energy Union with the access to secure and diverse and affordable energy sources. They should be legally binding.

We distinguished between two categories, which are interdependent:

- Physical access to the resource and to the infrastructure,
- Affordability.

The access to information is also important, especially for Roma and travelers, but also more widely for people who are not informed about their opportunities to access other sources.



Another issue we discussed is the access to energy services: is it a right for a household, or a right of the property to access the energy? In a few countries, to have a contract, the landlord has to guarantee that you can be connected to that service.

Topic 3: The future of energy systems (smart metering, big data, greater use of renewables and prosumers)

Task 4: what could be the effects of developments such as smart metering, big data, greater use of renewables and prosumers in terms of energy justice and energy poverty?

#### Smart and big data:

We have the ability to predict vulnerability and map efficiency through these technologies in a way that we previously not had before. One question is whether we have legal access to these data but in theory we could zoom things and understand things with a great amount of depth. The question around the legality of that brought us to (negative) questions of trust, knowledge and privacy. There is a procedural justice question when we are going about rolling out these technologies into new homes, do we describe that that data might be used in that way nor or in the future? An in general, how do we make sure that households are involved with that digitalization.

I also came up with the idea of profilisation, the idea being that these technologies are designed in theory to go everywhere. Giving an example of home again, we don't have the ability in our household to get a smart meter because the walls are too thick and we don't have mobile data connection and we don't have cabled internet, etc. This could in theory mean that urban environments become increasingly smart, whereas rural environments become increasingly standard.

As a positive though, it brings the ability for households perhaps, and for companies to increase the awareness on what is going on in the real time and for a household to provide safety from disconnection – the knowledge that things are or are not going well. Therefore as well, you can have a greater self-recognition of self-disconnection, the choice perhaps to be cold or the financial pressure to be cold.

Another point was the idea of proactive contract profiling where this data could collect a up-24 hours impression of what your household did or did not use and that data give advice on what might be a better tariff. There are questions there around the ownership of the data. Is that something that the company itself would advise to you, if so, is there an independent body that needs to do that? If so, you are providing data to a third party. Or can you yourself the consumer be giving that an go to something like a company or a market? Entitled to do your own energy profiling. So there is an idea of ownership and self-motivation around energy.

#### **Renewables and prosumers:**

We have discussed the fact that there is a general sway towards the idea that it is necessary and positive. Renewables and prosumers could increase democratization



and the co-ownership but that that might not be an equal process and that therefore different people might be made vulnerable through that. For example, some people cannot finance the move toward prosumption themselves. It might suit urban areas better than rural areas and vice-versa. And because of that tension you get distorted redistribution, you have some people who become the benefiters and some people who become the losers.

We also discussed the fact that this might create communities of self-sufficiency and that if that community is developed in a positive way it can target benefits towards particularly vulnerable people in a way that is not possible in a centralized system. But again, that is based on scale.

Then we came back to the idea of profilisation in a different way in that prosumption and renewables obviously involved a process of grid reversal or grid rebalancing or grid connection even for household who did not previously have that. So is that infrastructure in place or not and does this mean that some are disadvantaged again? In conclusion, these are new processes that mean that there are justice and poverty benefits and dis-benefits for new groups of people. Both of these can themselves be solutions. If there are to be solutions, we need to be conscious of the financial implications for companies, governments and users, we need to be conscious of issues of access and we need to conscious of the asymmetry of information.