Energy Poverty and Management Models in the Water and Energy Sectors: Towards the Universal Right to Guaranteed Basic Supplies
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1. Introduction

The present study seeks to compare water and energy management in Spain with models in different countries and regions around the European Union (EU). It will focus on whether these models ensure universal access and guaranteed supplies of these two resources, and analyse the extent to which the models discussed, and the policies underpinning them, effectively address the growing problem of energy poverty.  

The ultimate aim of this report is to learn the necessary lessons to build a management model that guarantees universal access to water and energy, whilst ensuring the active participation of the wider community. In the case of water, this means that citizens are able to participate in strategic decision-making, whilst promoting community ownership and the general improvement of the service and the lives of its users. This, in turn, means reinvesting profits in improving the water and sanitation system and adapting to the needs of the community at any given moment, rather than to narrow economic interests. For energy, such a management model promotes energy sovereignty by allowing citizens to ‘take unimpeded and conscious decisions about the generation, distribution and use of energy, in order that we may adapt to the cultural, economic, social and ecological conditions of our environment, so long as such decisions do not negatively impact on others’.  

This study posits that various mechanisms and structural characteristics exist within the Spanish energy, water and sanitation sectors that create and reinforce inequality and illegitimacy at different levels: disproportionate levels of debt among part of the population, the exclusion of some sections of the population entirely, the growth in socio-economic inequality, and immeasurable environmental damage. Whilst water is historically the domain of local authorities or municipalities, it is increasingly being privatised in the hands of fewer and fewer companies. In the last twenty years, the public sector in Spain has gone from providing water to over 60% of the population to less than half. Moreover, Agbar and FCC now represent 90% of private provision. The Spanish energy sector, meanwhile, is an oligopoly of five companies which, by law, are meant to maintain a separation between the generation, distribution and sale of energy. However, in practice, the companies benefit from a privileged market position, for example when it comes to setting prices, to the disadvantage of users. These characteristics of the Spanish energy sector not only present

1. Throughout this study, the term ‘energy poverty’ will be used to refer to access to water supplies, as well as to gas and electricity.
2. Definition published by Xse in 2013: www.xse.cat
3. Endesa, Iberdrola, Gas Natural Fenosa, Viesgo (previously E-on) and EDP
barriers to implementing a guarantee of basic services but, in fact, create a system which is diametrically opposed to such an aim.

Looking at each sector in more detail, it is notable that Spain has the fourth highest electricity prices in the EU, whilst Spanish electricity companies make the largest profits. In 1998, market liberalisation brought in changes to the system of price caps. Since then, the five big energy companies, all members of UNESA, have created a situation known as ‘tariff deficit’, where the companies’ costs are supposedly higher than what they earn through bills (for which the electricity companies do not have to provide accounts).

Meanwhile, companies are still paid, through consumers’ energy bills, to maintain obsolete energy installations, like nuclear or fossil-fuel generation, or benefit from other assistance, such stranded costs and capacity payments, both of which are currently under investigation by the EU as potentially constituting illegal state aid.

The gas sector is another example of a growing business increasingly concentrated in a few hands. Although gas is a fossil fuel, the Spanish government continues to promote it as a ‘transitional’ energy source. This means greater investment in infrastructure like pipelines, gas storage and regasification plants, none of which have been without controversy. These are paid for by citizens through higher gas bills, which can include payments for installations which are no longer in operation or have never operated.

Although the Spanish water sector is managed municipally, it is nonetheless dominated by a small number of providers: Agbar and FSS, with Aqualia and Acciona also gaining an increasing share of the market. In Catalonia, Agbar provides water to 74% of homes, often through mixed companies with different names but still belonging to the same corporate group. This type of devolved management seems to be inherently

4. Data from the first semester of 2016, Eurostat, according to the ‘Purchasing Power Standard’, fees and taxes included.
5. This has been the case for some years, see ‘Las eléctricas españolas casi doblan el margen de beneficio de las europeas’ (Jorrín 2013) and the trend seems likely to continue (‘Las tres grandes eléctricas han ganado más de 56.000 millones durante la crisis’, Clavero 2015).
6. ‘Razones del déficit de tarifa a pesar de la subida de la luz’ (Ecooo 2012).
7. For stranded costs, see ‘Cientos de entidades denuncian en la UE las ayudas extra de España a las eléctricas’ (La Vanguardia 2015). http://www.lavanguardia.com/natural/20150917/54436602295/entidades-denuncian-ue-ayudas-extra-espana-electricas.html For capacity payments, see ‘Bruselas cuestiona los mecanismos de compensación en el sector eléctrico’ (Bernardo and Monforte 2016).
linked to corruption and a lack of transparency, as has become increasingly clear over recent years.\(^9\)

In this context of private or concessionary management, concentrated in an oligopoly, natural monopoly or near-monopoly, the state and local and regional administrations have gradually handed over the task of managing the sector to the big companies themselves, to avoid the complication, time and money involved in regulating costs and prices and guaranteeing the rights of users. This study analyses the objectives and internal logic inherent within different models, be they private, public, public-private, concessionary, etc. A second, but no less important, question is what outcomes, be they social, environmental or economic, these models provide with respect to access to and enjoyment of basic rights.

Every country enacts measures to guarantee access to basic services and certain protections for citizens using them. The nature of these measures depends on the current management model in place in a given jurisdiction. Our intention is to study and compare these measures, with reference to the overarching management model and an emphasis on whether or not the policies enacted meet the needs of users, especially the most vulnerable.

This study will not only explore measures already taken but will also envisage new ones. These could form the basis of different models of resource management, with greater focus on social and environmental justice, whilst also maintaining efficiency and ensuring universal access to fundamental resources. In the final part of this study, we will highlight recommendations taken from models and initiatives already in use in different places around the EU. These recommendations will also explore issues which have unfortunately received less attention, such as direct and active citizen participation and governance models which overcome the public-private dichotomy.

\(^9\) For but a few examples of cases against Agbar, see ‘Aigua és Vida lleva a la Fiscalía Anticorrupción a Agbar y la AMB’, La Vanguardia 2013, and, more recently the ‘Pokémon’ case, in which Agbar is also implicated, ‘Aduanas destapa pagos a prostitutas en la red Pokémon’, Pontevedra 2015.
2. Methodology

Our methodology has been, in the first instance, to research the current state of play, defining the legislative and theoretical framework with which to analyse the various models and policy measures which are the object of this study.

Secondly, this report will compare the different models. This comparison does not claim to be exhaustive. We have not undertaken the task of comparing all management models in the EU water and energy sectors because of restrictions of space and because such an endeavour is not possible when models are characterised by such a wide variety of factors: climate, social structure and demography, social protection system, geography and type of infrastructure, level of public participation, etc. Nor would it make sense to talk of any single model of water management at member-state level, given that this sector is mainly organised along municipal lines.

As such, we have selected several policy measures and management models which can be compared in a coherent fashion, either because they share certain similarities or because they can be directly juxtaposed. Using this method, it is useful, for example, to compare public-sector management models which take completely different approaches to energy poverty because of the distinct root causes of the problem in each context. This could be because the social-security systems do not permit the same type of support or because the climate is more temperate or more extreme than in others. In the same vein, we will highlight instances where public and private-sector models undertake similar measures, even though, in theory, they are based upon divergent property regimes and involve stakeholders with different responsibilities.

We will also provide data on these management models and policy measures, specifically, the factors and variables which affect them or make them possible, such as those mentioned above: climate, social structure and demography, social protection system, geography and type of infrastructure, level of public participation, etc. This may be through bibliographical research into case studies and their contexts, interviews, the collection of experiences and a critical reflection on the (positive and negative) impacts that these factors have both on people and their surroundings.

In its analysis of different management models in the water and energy sectors, this study will approach the guaranteed access that these models ought to ensure as an issue of comprehensive environmental and social justice.

In our analysis, these universal rights take centre stage. The present study accounts for the structural, social and gender inequalities that exist within a socioeconomic and political model and for the impact said model has on these imbalances. In some cases, the model can even perpetuate said inequalities. For this reason, it would be pointless to aspire to management models that guarantee such rights at EU level without considering communities in the Global South, many of whom lack access to electricity despite having transmission lines passing through them. Equally, we cannot ignore the chain of global alms-giving that only aggravates poverty (including energy poverty), or the environmental debt amassed, in part, by the extraction of fossil fuels to heat European homes in the winter.

When considering which models can guarantee universal access to water and energy, it is necessary to identify the actors, both inside and outside the EU, who currently hold responsibility for ensuring these rights. Moreover, we also question the extent to which they are using their power to deliver on this responsibility and whether they are, in fact, the best stakeholders to carry out the task.

By necessity, intersectionality also features heavily in this analysis. Energy poverty is a multidimensional phenomenon that affects different sections of the population differently (Bouzarovski et al. 2012). It cannot be assumed that the same external factors are always in play, that the same groups are always affected, or these groups are blamed to the same extent for their situation. Factors which cause or aggravate this vulnerability vary by country and, of course, by the quality of the housing stock, the price of energy and water, the (lack of) clarity over available tariffs and bill items, or according to the avenues for complaint open to individual users or whole communities:

[F]uel poverty is a matter of distributive injustice in access to energy services which is produced through the interaction between underlying inequalities related to income, energy prices and housing. Addressing fuel poverty is also, however,
a matter of justice as recognition, in needing to recognise the differential rights and needs of vulnerable groups, and of procedural justice in terms of ensuring access to information, legal process, and effective influence in decision-making. [...] 

[O]ur analysis would indicate the need for action across a broad front. It is clear that no single response to the injustice of fuel poverty, over a single time frame, is sufficient, and that it is a problem that is embedded in how society functions socially, culturally and politically. (Walker and Day 2012)

In the same vein, environmental and climate injustice also contribute to the problem of energy poverty because the insufficient availability of resources for some is counterposed by the over-consumption of others. This contradiction is created by the economic and productive system:

Fuel poverty interventions may be largely within the scale of the nation-state, but the implications of national energy policy spread beyond, tied to global resource flows and directly modifying the global commons of the atmosphere. (Walker and Day 2012)

Forms of injustice are interconnected. In the same way, inaction on inequality aggravates other societal problems and reproduces existing inequalities. This makes the study of how power is exercised at different levels inescapable, particularly at local level, where decisions on management models, and how they can be shaped or reshaped, are taken. It is important to maintain an inclusive and sensitive approach to each context, to understand situations of vulnerability like one would any complex phenomenon (in which multiple risk factors are at play), whilst at the same time keeping in mind the universal nature of the rights under discussion.

Discussing access to water and energy as a question of social and environmental justice not only means recognising the rights of users in the present but those of future users, as well. Furthermore, approaching the issue in this manner implies addressing the ‘collateral damage’ done to people in other parts of the world and the debt owed to those people who carry out the work of caring for natural resources (Pérez Orozco 2014, González 2016).
4. Legislative Framework

Rights, protections and preventative measures are ostensibly guaranteed through a legislative framework, be that at Catalan, Spanish, European or global level. This legal basis can be used to demand that these obligations are met.

One of the main objects of this study is to investigate the extent to which the current legislative frameworks for the energy and water sectors actually guarantee a basic supply to the population. This includes analysing the various measures and mechanisms in place to address and prevent energy poverty.

4.1. Energy

4.1.a. The Spanish Electricity Sector Law

Law number 24/2013, which regulates the Spanish electricity sector, is the main legal framework for the industry. In practice, the legislation has deepened market access and liberalisation. The text itself states that energy is no longer a public service and instead should be considered a service of general economic interest, which lends greater protection to market forces.

The law proports to provide for the protection of vulnerable consumers. However, in practice, it falls far short of this aim, particularly in light of the approval of European directives 2009/72/CE and 2009/73/CE, neither of which has yet been fully implemented into Spanish legislation. The law contains only two protective measures: a ban on disconnecting the electricity supply of users reliant on life-support equipment and an inadequate discount tariffs for vulnerable consumers (discussed further in section 6.3.c.I).

As one supreme court justice stated in the ruling declaring Decree 6/2013 (modifying law number 22/210 of the Catalan Consumer Code) unconstitutional:

the system of state-wide protection for vulnerable consumers, as translates into the obligations upon the Autonomous Communities, is not, to my understanding, definitive and settled; rather reduced tariffs and tariffs of last resort do not constitute a completed system of protection in terms of energy supply for the most vulnerable.’ (Xiol Ríos, 2015)
4.1.b. European Directives: The Third Energy Package

Two EU directives, 2009/72/CE and 2009/73/CE, already referenced above, regulate the EU energy and gas markets at Union level and the relationships between suppliers and consumers. Every EU member state has its own energy market, management and governance model; however, since 2010, the EU has also made a series of recommendations based on these directives, known as the Third Energy Package. These consist of measures aimed at **protecting the energy market as well as vulnerable consumers**. The Vulnerable Consumers’ Working Group (VCWG), constituted by the EU to work on the application of the Third Energy Package and to gather and recommend strategies to tackle energy poverty at EU level, describes this balance in the following terms:

Any mechanism adopted to protect vulnerable customers should be in line with competitive market functioning and must take into account other social policy measures in the Member State. At the same time, competition should not result in any welfare loss, particularly for the vulnerable sectors of the population. (VCWG 2013)

For example, these directives encourage all member states to set a definition of what constitutes a vulnerable consumer and to ensure that sufficient measures are in place to protect them. This EU legislation thus calls on member states to identify and correct the contributing factors to energy consumer vulnerability.

However, this regulatory package only refers to measures which should be adopted by member states, when, in the majority of cases, it is in fact the suppliers who manage these services, sometimes under a system of concessions, sometimes under a completely liberalised model. In both cases, it is from these actors that governments must demand action to address energy poverty. One of the limits of these directives is that they do not make clear how governments should ensure these guarantees, nor what enforcement mechanisms should be employed.

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10. Here, it is worth recalling the European Charter of Fundamental Rights which recognises the right to access social protection and to housing assistance to guarantee a dignified existence (article 34), the obligation to guarantee a high level of consumer protection (article 38) and the fundamental right to access services of general economic interest (article 36).
4.1.c The Human Right to Adequate Housing: The Key to a Guaranteed Basic Supply

Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), part of the Universal Declaration of Human Rights, recognises the right of every person to an adequate standard of living for him or herself and his or her family. This includes food, clothing and housing, as well as the continuous improvement of living conditions. The ICESCR has developed the definition of this right in several General Comments that clarify the *conditions of an ‘adequate standard of living’: permanent access to natural and shared resources, to drinking water and to energy for cooking, heating and lighting."

These specific rights create different types of obligations on public authorities. The third General Comment states that all possible efforts should be made to meet these rights, whilst prioritising the most vulnerable, both in dealings with public bodies and also in the face of abuses committed by private entities.

4.1.d. The Complexity of the Right to Energy

A rights-based approach is increasingly incorporating energy into a series of ‘second-generation’ rights that seek to meet politically significant socio-economic and welfare needs of citizens around the globe. The ‘Right to Energy’, as set out at regional and global level, claims that

energy matters to the degree that it is more than just another commodity, and that the state and other actors involved in energy provisioning therefore have obligations that go beyond normal (uneven) market relations. (Walker 2016)

As such, a simple interpretation of this right to energy based on a good such as water quickly demonstrates that energy is not just one thing, but rather several, and therefore requires a different approach: energy is the product of multiples services, natural-resource flows are involved, etc. This means that generation, for example, can be improved without ensuring access to the most vulnerable, or without addressing fossil-fuel dependence.

This is why a more complex definition is vital: the right to access and use energy to cover basic necessities, without the socio-economic situation of a person posing an impediment (IDHC 2007 and 2009); greater detail about what these necessities mean in practice (lighting, heating, etc.); a recognition of the global impact of energy consumption and of the resources used in its generation (Walker 2016). The Catalan Ombudsman’s vision of a ‘subjective right’ to guaranteed basic supply is also useful here:
We ought to go beyond considering people as merely customers of suppliers and move towards an understanding of people as having a **subjective right to a basic supply at an affordable price and within the bounds of basic, essential or non-luxury consumption**. (Síndic de Greuges de Catalunya 2014)

### 4.2 Water

#### 4.2.a. Water Framework Directive

Directive 2000/60/CE, known as the Water Framework Directive, is one of the main reference points for water management in the EU. This directive develops different principles, two of which are relevant to the present study.

Firstly, the **cost-recovery principle** holds the body managing the water accountable for the methods used for calculating prices whilst also ensuring that ‘water pays for water’, which is to say that the environmental and economic costs of providing water are covered by water bills. Furthermore, the cost of using water and river space in a sustainable manner should fall on the person or entity that generates said costs and benefits from use of the resource. This principle also emphasises investment optimisation. For example, new waste infrastructure which should be delivered efficiently and with foresight.

Secondly, there is an important reference to the necessity of **public consultation** on matters involving water. According to the directive, transparent public participation should be a cornerstone of water policy. Resource management and measures to regulate water should be subject to social consensus, involve mechanisms for citizen participation and strive for complete transparency.

Both are principles which could help foster an obligation to provide a guaranteed basic supply. However, some companies have used the Water Framework Directive to justify price rises, particularly the provisions relating to increased infrastructure investment, without proving that said increases are actually the result of greater investment. It is also controversial to what extent private or mixed management systems genuinely open up decision-making to the required public consultation.
4.2.b ECI on the Universal Right to Water: A European Popular Legislative Initiative

The European Citizens’ Initiative (ECI) Right2Water, formally presented as “Water and sanitation are a human right! Water is a public good, not a commodity!” (2014), is the first successful initiative of its kind. It was initiated by the European Public Service Union (EPSU) and soon joined by the European Water Movement, representing social and citizens’ movements for water across Europe.

Their demands were the following: in first place, that EU institutions and member states act to ensure that all citizens can exercise their right to water and sanitation; secondly, to exclude water services from internal market rules and protect them from liberalisation; and finally, to redouble efforts at EU level to achieve universal access to water and sanitation.

The aim was to have access to water and sanitation declared a human right in European law and, as a result, in national legislation, as a means to ensure the public, transparent, democratic and environmentally friendly management of water. The ECI process required a certain number of signatures from a specified number of countries for the initiative to be considered. An unprecedented level of mobilisation led to the Commission approving the ECI in March 2014 and conceding that water would be left out of the concessions directive.

However, the ECI’s approval will only lead to changes if stakeholders at different levels, especially locally, respond. Responsibility for managing water ultimately falls to local authorities and it is here that the public management demanded by the ECI could be implemented.

4.2.c. Human Right to Water and Sanitation (HRWS)

The human right to water and sanitation (HRWS) was recognised by a 2010 resolution approved unanimously by the United Nations General Assembly. Previously, in 2007, the Charter of Emerging Human Rights (CEHR 2007) also made reference to the human right to water and sanitation.

In 2002, the Committee on Economic, Social and Cultural Rights also approved General Comment 15, which referenced water as a limited natural resource and as ‘public good fundamental for life and health [...] which should be treated as a social and cultural good,

11. Slovenia has recently included the fundamental right to water in its constitution (‘Slovenia adds water to constitution as fundamental right for all’, Agence France-Presse 2016).
and not primarily as an economic good [...] [It] is indispensable for leading a life in human dignity [and] is a prerequisite for the realization of other human rights.

Different social movements, organisations and legislative initiatives that deal with water management base their arguments on this rights-based approach and use the HRWS as the legal basis upon which to demand changes in public and private actors’ approach to water management.

4.3. Specific Legislation Dealing with Energy Poverty

There are currently few examples of legislation that specifically address energy poverty in the EU.

Member states are reluctant to push for EU legislative action in this area beyond the measures outlined in the Third Energy Package, which leaves a margin for interpretation to the member states. One argument is that the particular situation of each member state should be addressed in a way that takes account of their specific circumstances and that, as such, there can be no magic formula to tackle energy poverty across the entire European Union. However, specific laws aimed at tackling energy poverty are not common at member state-level, either. In many countries, it has only recently been identified as a problem and any resulting action taken (including in the application of EU law) has thus far been neither coordinated nor consistent. Bouzarovski et al. (2012) highlight stakeholders’

Concerns [...] over how future energy poverty-relevant components of EU regulation would be translated into member state settings, where national-level action to ameliorate energy poverty has been inconsistent and patchy.

Page (2015) goes into the detail of this inconsistent picture:

The European Union is very far off adopting a common policy to combat energy poverty. No European regulation exists, nor is one expected. The EU has told member states to legislate to protect vulnerable consumers in the gas and electricity markets. Seventeen of the twenty-eight member states have adopted measures, to greater or lesser effect, to meet the needs of at-risk groups. However, only the UK, Ireland, France and Slovakia have gone a step further and codified a definition of energy poverty into law. This is an essential first step towards taking effective measures to deal with the problem.
There are some exceptions, such as the UK, France and, recently, Catalonia, where legislation has been passed that specifically addresses energy poverty.

France approved Law 90-449 on the right to housing in 1990. It defines the concept of ‘energy precarity’ as a situation where a person has difficulties in accessing the energy necessary to meet their basic needs, be that because of insufficient funds or because of inadequate housing conditions. Then, in 2007, the country banned disconnections during the winter months (known as the winter respite). In 2013, the Brottes Law on the energy transition took measures to reduce energy poverty. This law introduced an obligation on both the public and private sectors to improve the insulation of housing stock and to dedicate funds to that end. It also enacted reduced tariffs for the most vulnerable and other year-long measures for the water sector (which was the first time such legislation had been passed anywhere in the world). Finally, the legislation also brought in strict procedures to be followed in cases of unpaid bills. Because of the ban on water disconnections, the law was challenged in the courts by Saur, the third-largest water multinational in France. In May 2015, the appeal was rejected by the French Constitutional Court which confirmed the illegality of such disconnections.12

The United Kingdom passed the Warm Homes Energy Conservation Act in 2000. This law gave legal force to the right of everyone in the UK to live free from energy poverty and allows for legal changes if this goal is not met. It has led to a retinue of measures being enacted into law, including financial support through the social security system and measures to improve energy efficiency in homes.

However, despite the existence of this legislation, the law is limited by its lack of detail on the means to eradicate energy poverty. One of the remaining challenges is access to legal remedy against providers. Whilst users now have this right, it is often difficult for those in need, particularly the most vulnerable, to access clear information on how to demand redress:

At a local household level the ability to challenge the operating practices of energy suppliers, for example regarding disconnections or use of pre-payment meters has not been aided either by the lack of clear regulation on these matters, or by generic barriers acting against those on low incomes making use of the legal system. Procedural justice in terms of access to legal mechanisms therefore remains limited. (Walker and Day 2012)

In Catalonia, Law 6/2013 was approved in December 2013, modifying law 22/2010 of the Catalan Consumer Code,13 which, for the first time, guaranteed a so-called winter respite.

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12. ‘French constitutional council bans water cut-offs’ (Public Services International 2015)
However, the new law still allowed unpaid bills to accumulate over time, leaving many families in long-term debt and without the necessary information to resolve their situation. In the end, only 900 families were able to benefit from the measure before the Constitutional Court suspended it in November 2014 and then declared it illegal in March 2016.

In December 2014, Law 20/2014 made a further change to the Consumer Code which envisaged the creation of a **Solidarity Fund** to cover bills left unpaid by vulnerable families.¹⁴ It also defined the concepts of energy poverty and of a person in a situation of economic vulnerability and established protocols so that such individuals could present a vulnerability report to suppliers in order to prevent disconnection. In October 2015, the Constitutional Court allowed the centre-right **Partido Popular** government to move forward with a challenge to the law’s constitutionality. However, in April 2016, the Constitutional Court finally lifted its suspension of the articles that defined energy poverty and economic vulnerability and of the article giving vulnerable consumers the right to present a report which attested to their situation in order to prevent disconnections. However, the Constitutional Court upheld the injunction on the articles prohibiting electricity and gas disconnections and on those setting out the prerequisites for disconnections in case of non-payment.

This attempt to legislate on energy poverty once again underlined the difficulty of effective government action to regulate the abusive practices of suppliers: disconnections continued, and the onus still lay with vulnerable families to prove that they could not afford their bills. Nor did the outcome resolve the problem of using public funds (which made up most of the Solidarity Fund) to further inflate the already high profits of energy companies that continued to cut supplies to vulnerable people. It wasn’t until **Law 24/2015** was passed that these issues found some response. The law is a major step forward that serves as a good precedent for the rest of Spain¹⁵ both in ensuring the right to a guaranteed basic supply and protection for the most vulnerable users.

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¹⁵. Similar laws have been proposed in the Autonomous Communities of **Murcia**, **Aragón**, **Baleares** and **País Valenciano**.
Law 24/2015 in Catalonia: Citizens demand the right to a guaranteed basic supply

In July 2015, the Catalan Parliament unanimously approved Law 24/2015. The legislation enacted urgent measures to tackle energy poverty and the housing emergency. It guarantees basic water, electricity and gas supplies and places an obligation on suppliers to take on part of the debt of families unable to pay their bills. For the housing sector, the law gives families who cannot pay their mortgages a second chance to keep their homes and strengthens support for social and public housing.

The legislation grew out of a Popular Legislative Initiative (ILP, by its Catalan and Spanish acronyms) launched by the Plataforma de Afectados por la Hipoteca (an organisation of those who have suffered repossessions during the crisis), the Alliance Against Energy Poverty and the DESC Observatory. The Initiative garnered 148,380 signatures, nearly three times the required 50,000.16 Once approved, the three founding organisations, known as the ILP’s coordinating group, together with the Catalan Government’s departments of Housing and Consumer Affairs, developed a series of protocols to ensure the law’s correct application. In October and November 2015, these guidelines were used to organise training seminars for more than 1000 staff in town halls around Catalonia. In April 2016, the centre-right Partido Popular government challenged the constitutionality of the housing articles in Law 24/2015. In October 2017, the Constitutional Court struck down these articles definitively, provoking widespread mobilisation against the move. Despite this confused picture, the articles dealing with energy poverty were left untouched and remain in force. This situation has been highlighted by the Plataforma de Afectados por la Hipoteca which continues to push for their immediate application by all relevant actors.

5. What Role for Different Stakeholders?

Before entering into a more detailed analysis of which management models ensure a guaranteed basic provision of utilities, it is useful to identify the stakeholders who play, or could play, an important role within these systems.

Clearly, any management model involves a variety of roles for different entities at different levels, apart from that played by central government. In the words of the Vulnerable Consumer Working Group:

> [I]t is not just Member State Governments that have a role to play. Local authorities, national regulatory authorities, consumer associations, industry, independent ombudsmen etc. are all key contributors to the process of reducing - or, at the very least, stabilising - levels of vulnerability and energy poverty where it exists. (VCWWG 2012)

5.1. Governments and Public Administrations

Governments are charged with guaranteeing the rights of all citizens. They should ensure that information about these rights is made available to all, provide the necessary tools and enact the necessary legislation to see that these rights are respected. This means that governments and public administrations are also responsible for measures to protect the most vulnerable and should make sure that such measures go as far as is necessary to achieve this end. Sometimes, protective measures exist but receive little uptake. Nonetheless, public administrations, at all levels, remain responsible for ensuring that no one is left behind. At the same time, governments must guarantee protection and inclusion through the companies that manage service concessions, where this is the case, or by establishing supervision and follow-up mechanisms where services have been privatised.

For their part, local authorities are the closest administrative level to citizens, and it falls to them to identify people in vulnerable situations. They also provide support to higher-level administrative bodies through casework and needs identification; for example, by passing information to social services to facilitate access to certain social protection or redistributive programs.
It is therefore up to both central and local governments to ensure the application of laws intended to guarantee these rights and, where necessary, to sanction those who do not comply. This latter task is more difficult than it may appear. In Spain, sections of the current legislation are not respected by large companies in the sector. Nor are the rules enforced by the relevant judicial or oversight bodies, as demonstrated by these companies’ privileged position and the impunity with which they act, in some cases with the collusion of public authorities.\textsuperscript{17}

\section*{5.2. Regulators}

Energy regulators, which in most cases operate at national level, are often entrusted with the role of ensuring that pricing, regulation and markets function correctly:

\begin{quote}
The role of regulators should build on the 3\textsuperscript{rd} Energy Package legislation and they should monitor the state of the market, including price levels and market failure. NRAs [national regulatory authorities] should detect and protect against general market failure. (VCWG 2013)
\end{quote}

Such a statement poses the question of whether what is understood as functional within the terms of the management system is also functional for citizens. It poses other questions, too, such as how to guarantee the genuine independence of regulatory bodies and ensure their instructions and recommendations are followed in a sector which is frequently monopolistic or oligopolistic. These organisations’ mandates and their importance relative to other stakeholders and mechanisms within any given management system must also be defined.\textsuperscript{18}

In Spain, the task of the regulator is undermined by the way in which the gas and electricity sectors work: there is no information sharing, for example, on the real cost of energy (Cotarelo 2015), and the regulator does not monitor companies in an efficient

\begin{flushleft}
\textsuperscript{17} The recent case of an eighty-one-year-old woman in Reus highlights this point. The pensioner perished in a housefire caused by a candle she was using for light. Two months prior to the blaze, Gas Natural Fenosa had disconnected her, but had not informed social services, as required by Law 24/2015 and to this date has not accepted responsibility (‘El Ayuntamiento denunciará a Gas Natural por no avisar antes de cortar la luz a la víctima del incendio’, Reus Diari 2016.) Less well publicised were the manoeuvres inside Endesa before passing into the hands of the Italian company, Enel (‘Anatomía de un escándalo financiero’, Lago 2014.) This study will also cite cases involving Agbar, Suez, Veolia and Iberdrola.
\end{flushleft}

\begin{flushleft}
\textsuperscript{18} Several studies on national regulatory authorities at European level (www.acer.europa.eu) have found that a lack of resources are destined to this important question within different management models when compared to other issues which are given more attention and resources. Most countries dedicate more resources to complaint mechanisms than to independent regulatory bodies.
\end{flushleft}
manner. Although it has the legal authority to report on debt and disconnections, in line with EU recommendations, this task remains completely unrealised.

Regulators have produced some reports critical of the costs associated with the electricity and gas systems. For example, a 2012 report by the National Energy Commission (Comisión Nacional de Energía, in Spanish), now the National Commission on Markets and Competition (Comisión Nacional de los Mercados y la Competencia), recognised that gas-storage infrastructure had been overdeveloped due to incorrect predictions and that this accounted for most of the sector’s financial deficit. However, these reports do not result in any consequences, either for the government or for the companies involved, with only a few, belated exceptions.¹⁹

Water regulators, which function at municipal or community level, tend to assume a role managing prices and consumer tariffs as well as overseeing investment and the costs presented by providers.

The corporate water sector has proposed the creation of a single national regulator to centralise these functions into one organism, arguing that Spain should move towards a model of national, or at least regional, regulation. In their view, the Spanish model of municipal regulation is uncommon and undesirable:

The current state of affairs, where regulatory responsibility is distributed between local authorities, is uncommon in OECD countries, where only 25% (four out of seventeen) of countries studied follow a similar model to Spain. In the majority of markets, the power of economic regulation lies in regulatory organisms or technical commissions, or with regional governments. (PWC 2014)

Agbar and those close to the company support this view. At conference hosted by Agbar in October 2017, Jesús Sánchez Lambas,²⁰ a lawyer, called for

a model of self-regulated public-private collaboration, where public authorities do the politics and companies seek out productivity and maximum efficiency, which supervises the different stakeholders involved in water management and gets rid of inefficient entities like the confederaciones hidrográficas [public bodies which manage regional water resources].²¹

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¹⁹. ‘La CNMC multa con 25 millones a Iberdrola por manipulación en precio del mercado eléctrico’ (Europa Press 2015)
²⁰. He is also secretary of the controversial NGO Transparency International in Spain (‘¿Es Transparencia Internacional España una ONG vendida a UpyD?’ Larrauri 2014).
Others, like Joan Gaya Fuertes, former manager at the Integral Water Management Consortium of Catalonia (CONGIAC in Catalan), have criticised this position and argue that the real motivation behind calls for a single regulator is not greater efficiency. These critics further state that each area is best placed to deal with its own particular circumstances and, therefore, the task of regulating the sector cannot be centralised. Finally, they also claim that the model proposed by some in the corporate sector would lead to a greater concentration of power and less oversight by citizens:

Private-sector pressure for a single regulator is especially centred on economic concerns (tariffs) and the unified management of the water cycle. In the case of the former, they do not offer an analysis of the real, often contradictory, problems at play. The latter proposition provides no answer to concrete technical problems whilst creating unnecessary monopolisation in the management of the water cycle.22

5.3. Suppliers

The EU, through the Vulnerable Consumers Working Group, proposes a number of duties which should be incumbent on suppliers:

Industry has a role to play in ensuring that consumers are informed about their options regarding energy supplier and tariffs. Bills and other information should be clear and simple to ensure consumers understand their consumption levels, contract end date etc. Voluntary action by energy suppliers can assist vulnerable customers with managing their consumption and their bills. (VCWG 2013)

This, however, only confers the responsibility to provide information to users and not the obligation to guarantee the service. What is more, it is precisely the responsibility to ‘manage’ these rights that can come into conflict with the profit motive. This is why governments have to establish supervisory mechanisms for these companies and also ensure they comply with the law, especially where the protection of vulnerable individuals against powerful stakeholders is concerned.

Unfortunately, this power imbalance sometimes leads to abusive practices by suppliers either in their home country or abroad. These practices are aggravated in monopolistic or oligopolistic models, both in the company’s own member state and elsewhere. Such wrongdoing can take the form of setting exorbitant prices or payment terms which are not justified by the costs of providing the service, pushing ahead with disconnections,

22. ‘La regulación del ciclo del agua’ (Gaya Fuertes 2016).
harassing those in debt with constant telephone calls or engaging in dodgy door-to-door sales techniques. At a global level, these have a huge impact both on the environment and local communities. All whilst the companies responsible vaunt their Corporate Social Responsibility strategies by, for example, financing climate summits. The presence of former politicians on the boards of water and energy companies, and the associated corruption scandals, do little to tackle this problem. Instead, it only underlines the impunity with which these individuals and companies often operate.

We must demand genuine accountability from suppliers, instead of expecting public authorities to pay the cost of energy poverty by using public funds to cover families’ unpaid bills. This type of measures serves only to preserve the multimillion-euro profits of those companies who do nothing to help families facing difficulties whilst, in some cases, harassing and stigmatising them.

5.4. Third Sector: Citizen Platforms, Social Movements, Consumer Organisations and NGOs

Civil society, in its different forms, often arrives at this issue from the need to highlight problems which have not been dealt with by other stakeholders, or which have only been partially or poorly addressed. Citizen oversight of private stakeholders and institutions is usually a sign of a healthy and democratic political system. As such, it is worth analysing what role these stakeholders play, depending on the management model in place. Is their principal task that of holding authorities to account; or are they providing direct assistance to users in the absence of effective support from the state?

Citizen platforms and social movements exist independently of public authorities but play a vital role in holding these to account. Such movements keep government actors accountable through institutional means and, where these are not available or are ineffective, civil disobedience. In all cases, these actors are faced with the, sometimes unavoidable, task of being the first response in emergency situations and ongoing support at different levels, something which in principle should be the responsibility of governments. This situation is often raised by social movements in their demands towards public authorities, whilst underlining the unavoidable responsibility that falls upon the suppliers to guarantee these rights.

23. ‘La doble cara de las empresas que financian la Cumbre del Clima de París’ (Martínez 2015)
24. Sections 6.3.e, 6.4.a and 6.4.d, dealing with transparency and service quality, will touch on other examples.
Another key issue is who finances these organisations. The EU, for example, has proposed that consumer organisations could audit suppliers, for which they would then receive financing in return (to be passed through public authorities):

Financing the engagement of consumer representatives is not an easy challenge to deal with. National governments can also further contribute to a strong consumer voice by supporting organisations with expertise in the energy sector, as this will help balance outcomes for all parties concerned [...] existing funding models include industry contributions directed through government.

Such organisations, like, for example, Facua, do not accept money from companies in order to guarantee their independence. However, if there were truly independent regulators it would not be necessary to ask consumer organisations to take on the task of auditing suppliers. Instead, they could be left to their traditional tasks of providing information, highlighting abuses and campaigning.

5.5. Other Organisations

Finally, ombudsmen and organisations with a specific focus on poverty and/or energy poverty are found in different models of water and energy management. These groups use their specialist knowledge and a rights-based approach to protect and defend the most vulnerable. However, the same issue of removing responsibility from suppliers is also in play. It is aggravated by the fact that ombudsmen often lack the power to take judicial or legislative action and are given briefs with more focus on supervising public authorities than private-sector actors.

It is also worth noting the existence of energy poverty watchdogs, such as the Observatoire National de la Précariété Énergetique. These groups do invaluable work studying, analysing and measuring the prevalence and impact of energy poverty.

25. Some examples include: the Energy Ombudsman in the UK (https://www.ombudsman-services.org/energy.html) and the Médiateur National de l’Énergie in France (http://www.energie-mediateur.fr/). It is also worth noting the Síndic de Greuges de Catalunya that has published a report on the right to guaranteed basic supply of utilities (Síndic de Greuges de Catalunya 2014).
26. www.onpe.org
6. Which Model to Follow and What Measures to Take?

Within the EU, there are almost as many models for managing public resources, such as energy and water, as there are member states.

This report aims to both confront and go beyond the debate over the relative merits of public versus private management. A first step is to take account of the principles, regulation and behaviours that underlie the models under discussion. Using such an approach, it becomes clear that there are public systems which fail to guarantee basic rights and models of private ownership, in the form of local cooperatives, that deliver these. As such, it is of vital importance to understand each model in relation to the prevailing political and economic system and its the climatic, demographic and socio-cultural context.

In Bulgaria, for example, energy prices are much lower than in other EU countries. Yet, an average of 14% of household income goes towards paying electricity and water bills, meaning that energy poverty is more prevalent than elsewhere, despite prices being nominally lower. Surprisingly, energy poverty is also much more widespread in the south of Europe than in the north, where the climate is generally colder. However, social protection systems in these countries mean that, in many cases, climate is not the determining factor. These are but two examples of the importance of placing each case study in context in order to accurately compare the different models.

When looking for models that guarantee access to basic supplies of water and power, the question arises: what are the stated arguments used to justify this or that measure or the choice of one model over another? This study has proposed a theoretical framework with which to approach this question, albeit one that will not always match up perfectly with the models discussed. The following sections summarise a number of different measures and models, as well the ideological arguments that underpin them.
6.1. Measures and Models: Improving Competition or Challenging the Logic of the Market?

Market-led measures are implemented throughout the EU in an attempt to prevent or ‘correct’ instances of energy poverty. Such systems tend to see the emergence of vulnerable groups as externalities or aberrations to be corrected, with the ultimate objective always being to exploit resources in the most market-efficient way possible.

This logic leads to the marketisation (and even the financialisation) of common goods, such as water. Increasing reference is made, for example, to the ‘global water market’ as an investment opportunity. Water management is a profitable business venture and not a mechanism of delivering people their rights (Gerebizza & Tricarico 2013, Cirelli 2008). The drinking-water market has been something of a treasure trove for big corporations which they have then used to move into areas like waste and sanitation, or other financialised sectors like infrastructure. These, along with the energy sector, have opened up as new market opportunities for financial investors over the last decade, and especially since the crisis (Cotarelo 2015, Cotalero & Pérez 2015).

As a result, this market logic has shaped energy and water provision and, even, underpinned proposed solutions to the problem of energy poverty. In terms of EU-member-state action to combat energy poverty, measures to improve market functioning and to deepen competition through liberalisation predominate. For example, one commonly employed strategy is to promote the construction of interconnection infrastructure, under the assumption that this will improve competition between suppliers, leading to a better offer for users.

Moreover, in some Member States, the energy market may not yet be sufficiently developed for competition to keep prices affordable for all consumers, to promote better service levels and innovative products [...] This is especially applicable in those Member States that have only recently liberalised their markets or those that have not yet done so, especially if lack of interconnectors between Member States impedes diversity of supply. (VCWG 2013)

Here, the EU recognises that the normal functioning of energy markets can lead to inequality between users, unaffordable prices for vulnerable families, etc., but does not identify these as a problem per se or as a symptom of dysfunctionality within the model itself. Rather, it hopes that the regulator will deliver improvements. However, as the present study has shown, regulators face numerous difficulties in accomplishing this task in a monopolistic or oligopolistic sector.
User vulnerability does not only stem from individual circumstances but also from the functioning of the market and the practices of suppliers. Despite this, the EU insists on promoting measures aimed at changing users’ habits, rather than addressing the inequalities inherent in the market itself. Although the proposed reforms recognise the need for measures to protect those left behind, these are always with the objective of further integration of the internal market:

Developments in energy retail markets could prove challenging to consumers who may not have the tools or competencies (literacy, including computer literacy, access to (online) information etc.) to participate actively and reap the benefits on offer as markets become more complex. Consumers may thus increasingly face the risk of vulnerability for reasons other than, or in addition to, poor health, low income or a precarious economic situation etc. This could be exacerbated by unfair commercial practices or selective marketing strategies as vulnerability depends on both the individual’s situation and market activity [...] The growing importance of the problem is not an argument against continued liberalisation to open markets and encourage competition, but highlights instead the fact that market reform must be accompanied by appropriate measures for all types of consumers who may be vulnerable. Ensuring adequate support for consumers, especially those in vulnerable situations, could thus be one of the key success drivers of the completion of the EU’s internal energy market. (VCWG 2013)

For the VCWG, consumer protection must be limited to measures that do not interfere with the ‘correct’ functioning and deeper integration of the internal market. This approach begs the question: are consumers sufficiently protected as market integration deepens? The protective measures currently envisaged are based on a market logic that runs counter to guaranteeing rights or ensuring a basic provision of services for all.

Models or specific measures that place limits on the free rein of the market—for example, through legislation like the Brottes Law in France or Law 24/2015 in Catalonia—can more evenly distribute the cost of energy poverty between suppliers, public authorities, individual users, etc. For example, empowering citizens to better understand their water or electricity bills would be a positive step, as users could avoid unnecessary charges for services that they do not require. However, users should never have to shoulder blame for being vulnerable or for creating ‘distortions’ in the market.

Limits must be placed on the profits that can be extracted from delivering essential services. People’s rights cannot be traded away in the name of doing business. This is why it is so urgent that the rest of Spain, and the EU, follow the precedent set by the French

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27. The EU seeks to complete the internal market for gas and electricity by constructing interconnection infrastructure and through the further liberalisation of these sectors throughout the Union.
and Catalan laws and move towards banning the disconnection of vulnerable families. Furthermore, measures are required that allow for the renegotiation of accumulated back payments to prevent vulnerable consumers from being laden with a lifetime of debt that they can never realistically hope to repay. The companies with the responsibility (and privilege) of managing these essential services must be made to take on all or part of such debts.\textsuperscript{28}

6.2. The Policies Underpinning Measures to Tackle Energy Poverty

This report has thus far explored the types of measures or management models which best reduce or eradicate energy poverty. We will now turn to how to win these changes, specifically, whether energy poverty is best tackled by relying on existing protections or through other forms of political influence, campaigning and negotiation.

6.2.a. Models, Measures and ‘Solutions’ Based on Institutional Action

One common means of addressing energy poverty, apparent in various management models, is institutional action, specifically through social policy. In some cases, this recourse to social-policy instruments is accompanied by specific measures in the field of energy poverty, ideally seeking a certain coherence between the two, in order to achieve a fairer and more inclusive model. In other cases, social policy may be employed to a lesser extent, with energy policy playing a more central role.

In either instance, the extent to which policies effectively mitigate energy poverty amongst vulnerable families is key. It is, therefore, essential to analyse if the policy has succeeded in meeting its stated objective or if it needs changed or reviewed. \textbf{The EU has called on member states to undertake precisely this type of policy analysis in order to establish the most effective combination of social and energy policy instruments.} The Vulnerable Consumers Working Group advocates replacing financial-support mechanisms (which it considers emergency measures) with policies that improve energy efficiency (seen as a long-term investment in eliminating energy poverty).

\textsuperscript{28} See sections 6.3.c.III and 6.4.b.III.
However, it can be argued that neither of these two approaches tackles the root causes of energy vulnerability: high prices and the market forces which set them. Energy efficiency and financial-support measures both seek to alleviate problems faced by consumers at an individual level, either because of poor-quality housing or financial hardship.

This type of policy approach nevertheless needs to take account of the context in which vulnerable users find themselves. The global financial crisis has had different effects on public welfare in different member states. Austerity measures and economic hardship in certain countries have had a particular impact (Bouzarovski et al., 2015). In the context of austerity policies, it is especially important to ask how public funds are being spent. Of particular interest is if the money spent on social protection (for example, social services paying vulnerable families energy bills in cases where they cannot afford them) is the best use of funds to tackle energy poverty? Or, would the money be better spent on energy efficiency measures? Finally, the question of who ultimately benefits from this public expenditure is unavoidable, and leads to the issue of how private-sector actors can also be made to share part of the burden.

In 2015, the Catalan Government launched a ten-million-euro solidarity fund, which only ended up paying out 22% of its total capital. Different local governments around Spain have also lauded similar initiatives. Elsewhere, for example in the UK or in Eastern European countries, like Croatia, there has been a strong political commitment to energy efficiency measures, on top of financial support. This has, in large part, been driven by research showing major shortfalls in home insulation (Robic and Ancic 2016). However, neither approach challenges high energy prices head on. This is one of the three key causes of energy poverty and one which could be addressed through direct state intervention. Yet, this is not a strategy that member states seem willing to consider, partly because of the challenge of confronting the vested interests of big private suppliers.

6.2.b. Models, Measures and ‘Solutions’ Based on Voluntary Agreements

Some management models attempt to secure a guaranteed supply through voluntary agreements with providers instead of through legislation.

For example, in the UK, there is a voluntary agreement between companies in the sector not to disconnect a user’s supply if that person is considered vulnerable. Other volun-

29. ‘La Generalitat només va gastar el 22% del fons de pobresa energètica el 2015’ (Baquero 2016)
30. ‘Protecting Vulnerable Customers from Disconnection’ (The Energy UK Safety Net 2016)
tary agreements, in countries like the UK, Italy, Belgium and the Netherlands, define good sales practice and what information should appear on bills (these will be covered in more detail in section 6.3.d).

Similarly, in Barcelona, before Law 24/2015 was passed, access to water and guarantee of supply relied on the voluntary engagement of Agbar, the city’s water company. The application of Law 24/2015 has been slower than hoped for: it has proved difficult to reach agreement between the supplier and public authorities on several concrete issues, including debt relief for vulnerable families. As long as there is no agreement, Agbar is meant to follow the precautionary principle (something which until recently has not been respected). Nonetheless, the company is still dealing with unpaid bills according to its own, voluntary, criteria.

Ceding responsibility for the protection of vulnerable users to voluntary agreements creates uncertainty. There are currently 1.1 billion people worldwide who do not have access to clean water and 1.2 billion who lack electricity. In Europe, 50 million people are affected by energy poverty. These figures are testament to a grave and urgent situation that requires legally enforceable regulation and a policy of actively identifying cases of vulnerability. Sections 6.3 and 6.4 will outline different measures, models and proposals aimed at tackling the issue, including some based on voluntary agreements, and will interrogate the shortcomings that these present.

6.2.c. Extra-Institutional Approaches

It is often mobilisation, political pressure and campaigning by civil society that have brought about management models which most effectively deliver greater social and environmental justice.

A pertinent example is Law 24/2014, which has already been discussed. The legislation started life as a popular legislative initiative and has given legal effect to many of civil society’s demands around housing and energy poverty. But it is also worth recalling other, less recent, examples. One of these would be the popular struggle commonly known as the ‘water war’ in the nineties, when civil society in several municipalities in the Province of Barcelona turned to civil disobedience, following a 50% to 100% hike in bills. The move-

31. Civil society organisation, Aigua és Vida, estimates that there were 120,000 disconnections in 2014.
32. The company usually does this through its own solidarity fund that takes on some unpaid bills and that the company itself decides how to manage.
33. Data from the World Bank, 2013.
34. Data from European Fuel Poverty and Energy Efficiency, 2009.
ment mobilised against the lack of transparent water bills and called for non-payment of taxes and charges they considered unjustified (Sempere 2004). Around 200,000 people joined the non-payment campaign which moved beyond collectively underpaying bills and started to demand a universal and equitable service based on open and transparent accounting. The movement saw water management as a question of general public interest which went beyond the problems of domestic consumption. Citizens sought to deepen public participation in the way water was used and managed. They wanted to move away from viewing water as a purely technical problem and redefine it as a wider social issue.

Other examples outside of the EU are also worth examining. These include cases where communities have taken over the management of resources in response to institutional inaction. In several Latin American countries, self-organised plebiscites, initially held in response to mining or drilling, have now also been used to consult on hydro-electric projects. These participative processes are organised by the affected communities themselves and demand their right as indigenous peoples, under International Labour Organisation Convention 169, to be consulted on development projects on their land (Walter and Urkidi 2014).

Despite being rejected at the ballot box, many hydro-electric projects have carried on regardless. Nor have they delivered on promises of electricity for the local population, another failing which has been met with popular protest. One case of particular interest is that of 20,000 families in the department of San Marcos, Guatemala. Gas Natural Fenosa cut their electricity supply in January 2011 after the local community expressed their concerns over human rights violations by the company through a peaceful and coordinated non-payment campaign.35

The southern coast of Guatemala has witnessed other acts of resistance to the domination of the electricity companies. These corporations often set up operations in indigenous communities from where they supply power to extractive industries, without providing electricity to the local population. Faced with this ongoing challenge, over 1000 so-called ‘communities of resistance’ have been established in more than 100 municipalities, covering 20 of the nation’s 22 departments. These communities of resistance organise direct connections to the electricity network for their towns, whilst calling for the nationalisation of the sector across the country.36 Finally, it is also worth highlighting the example of the social movement against the construction of hydroelectric dams in Brazil (MAB, in Portuguese). It offers a positive alternative by creating a joint platform for electricity users and workers with the aim of guaranteeing an energy model focussed on people’s

35. ‘Gas natural Fenosa deja a más de 20.000 familias sin luz como medida de presión contra las revueltas en las poblaciones’ (Carrión and Pérez, 2011).
36. ‘Mientras no se nacionalice, no pagamos la energía eléctrica’ (Itzamná, 2014)
needs, reducing poverty and fighting for an energy model nationwide that meets these objectives.\textsuperscript{37}

\section*{6.3 Energy: Different Measures to Address Divergent Problems}

Now that the guiding logic which underpins the various management models for water and energy has been unpacked, our analysis will focus in more detail on those models which claim to reduce energy poverty and discuss the extent to which they meet this commitment. Organisations like the EU define this vulnerability as multi-dimensional, which means that it depends both on the individual circumstances of the user as well as the state of the market as a whole. However, there is a lack of coherence in this approach, particularly as to whether these situations of vulnerability are best dealt with through a unified strategy or by applying European recommendations differently in each country:

What is more, top-down efforts are often driven by a consumer protection agenda, rather than one aimed at addressing the structural conditions that lead to energy poverty. Further exacerbating the situation, we were told, is the lack of systematic scientific knowledge about the problem, as well as the unwillingness of some member states to acknowledge the existence of an energy poverty demographic on their territory. […]

Not only have the provisions in the Third Energy Package and subsequent documents failed to translate into any mandatory EU-level requirements to deal with energy poverty specifically – other than competition and energy efficiency policies, which are themselves much more indirect – but the EU has even stopped short of providing a common definition of the problem, which might give it better visibility at the member-state level. (Bouzarovski et al. 2012)

Cases of energy poverty are normally described as a kind of deprivation influenced by three factors: i) wages or purchasing power; ii) energy prices; iii) energy efficiency in the home. It is, however, not only important that sufficient energy be available at reasonable prices, but that appropriate solutions are found for each individual family and their socio-demographic conditions. Specific solutions must also take account of

\textsuperscript{37} ‘Condições para renovação das concessões do setor elétrico nacional’ (Plataforma Operária e Camponesa para Energia, 2012).
country, region, climate and social and cultural background, whilst also drawing attention to the underlying problems themselves (Buzar 2007).

The specific vulnerabilities either causing or arising from energy poverty are numerous and vary by time and place. Measures taken by each country therefore need to be assessed by how affectively they target the actors responsible for each factor contributing to the overall problem. As stated in section 6.2.a, enacting measures that protect people is not the same as enacting measures that protect markets. Furthermore, energy poverty is a vulnerability which aggravates others, creating a vicious cycle where those in poverty are pulled further into deprivation: people are not only vulnerable but suffer different vulnerabilities to differing degrees.

Other EU bodies have also signalled the need for a careful analysis of the structural causes of vulnerability as a means to move beyond only treating the symptoms of poverty. The European Economic and Social Committee (ECOSOC) has underlined the importance of recognising access to energy as a human right and has even proposed that this be included in the Lisbon Treaty. The consultative body has also highlighted the failure of market liberalisation to prevent an overall rise in prices and has called for a Europe-wide strategy to combat energy poverty (ECOSOC 2013).

6.3.a Energy Efficiency

Energy efficiency or energy-saving measures tend to be deployed in management models where inadequate housing (or substandard installations, furnishings or maintenance) has been identified as the main driver of energy poverty.

Such measures are in line with the EU 2020 agreement, ratified by the European Council in 2007, on reducing emissions and increasing the use of renewable energy. This package encourages vulnerable households to improve their energy efficiency as a means of reducing their energy bills. The EU also points to the importance of reducing consumption in order to shrink households’ carbon footprint and to protect vulnerable consumers.

Reducing primary energy consumption in a cost-efficient way should be a priority along the entire energy chain. More efficient energy extraction, production, transportation and end-use will benefit all final consumers, including those in a vulnerable situation, as these efficiency gains will help reduce their energy bills. A combination of energy-efficiency measures and lower energy consumption means that consumers are more protected from fluctuations in energy prices as their total energy consumption is lower. (VCWG 2013)
This vision, however, contains two important inconsistencies. **On the one hand, despite the strategy set out in the EU 2020 agreement, the benefits of greater energy efficiency and lower consumption are not shared equally between all economic groups and sections of the population, because not everyone has the same consumption patterns or economic resources.** It makes little sense to ask the poorest families to make changes before anyone else. Many vulnerable people will simply not have the financial resources to pay for improved energy efficiency in their home.

On the other hand, energy efficiency is endorsed as a mechanism for reducing consumption whilst providing added protection against price fluctuations. However, would it not be more logical to prevent price rises directly? **Rather than skirting round the problem of higher prices, the market system that creates these variations has to be dealt with head on. This is the way to guarantee accessible and inclusive services to the entire population.** When a family reduces their consumption, they are only reducing part of their bill: any bill item with a fixed or regulated price remains unchanged regardless of any reductions in household consumption. These fixed costs, which in Spain make up around 60% of a bill, continue to respond to market forces, even though they do not represent the unit cost of electricity used. This is further proof of the incoherence of any strategy that only targets energy vulnerability as a result of consumption and not as a problem stemming from the overall functioning of the market.

In any case, management models that place a heavy emphasis on energy efficiency as a means of alleviating energy poverty still need to offer information and technical and financial support to vulnerable families.

At this juncture, it seems opportune to go into more detail about several programmes undertaken in member states.

**United Kingdom: energy efficiency measures increasingly aligned with market forces**

**Warm Front Scheme:** This programme provided public money for heating and insulation to qualifying households, covering relevant costs nearly in their entirety. However, it saw its budget cut by nearly two thirds in its final two years and was wound up in 2012. From then on, the government began introducing the so-called “Green Deal”.

**Green Deal:** This programme gives discounts on bills for the amount of energy saved from improvements in a household’s energy efficiency.
This move takes responsibility for both identifying and tackling income and housing related energy vulnerability away from the state and into the private sector, where cost efficiency will be a greater imperative and accountability likely reduced (compared to the public sector) regarding how vulnerable households are selected, treated or passed over. (Walker and Day 2012)

Stemming from the UK’s market-oriented strategy for improving energy efficiency and reducing families’ CO2 emissions, the Green Deal allows households to undertake various energy-saving and emissions-reducing measures in their homes without any upfront costs. The money is instead advanced by the private sector. The resulting loan is then linked to the dwelling and not the inhabitants, meaning that a family can move out and not continue to be liable for the remaining costs. The key requirement is that projected energy savings are higher than the associated repayments. This condition is known as the ‘golden rule’.

The poorest households should also receive financial assistance which companies are obliged to offer through the **Energy Company Obligation** (ECO). Each provider’s contribution is calculated according to their market share. The ECO is effectively an advance on the cost of energy-efficiency measures to be recouped from future bills. The danger is that the savings do not meet the costs of the initial investment, leaving families to foot the bill and at risk of falling into energy poverty to make up the difference.

The Green Deal and Energy Company Obligation are also intended to reduce the occurrence of income related vulnerability by stimulating private sector growth and creating employment: a ‘trickle down’ rather than a redistributive approach. (Walker and Day 2012)

Policy makers must ensure that the cost of the ECO does not drive more families into fuel poverty owing to the way in which suppliers add these charges to bills, and the dynamics of who benefits from the subsidy of more expensive measures such as solid wall insulation. This may require a new approach to sharing the costs of the obligations on energy companies across energy consumers, and careful overall scheme design in terms of the balance of eligibility for support between households and homes. (Guertler 2012)

Other similar measures have been tried in countries such as France, Belgium and, especially, in Eastern Europe.

The French government offers public money in the form of microcredits (of between 3,000 and 10,000 euros) to improve energy efficiency in homes, with repayment periods of between three and six years. French regional governments have also introduced financial help, as part of the “Habiter Mieux” programme. It provides in-home support both to improve energy efficiency in residential buildings and to educate families about energy saving. There have also been strides made towards improving energy efficiency in public housing, with 320 million euros set aside to this end (VCWG 2013).

In Belgium, interest-free loans, to be repaid over a maximum of five years, are available to purchase energy-efficient household appliances. Other measures include home visits to assess a residence’s energy efficiency. In Flanders, energy audits are carried out, whilst in Wallonia a system of energy advisors exists.\(^{40}\)

In Croatia, the problem of energy poverty has become more visible over recent years. In response, an in-depth study was carried out that identified the poor state of the housing stock as a principal cause. The research advocates improving energy efficiency as key to combating energy poverty and calls for a broad range of measures, including **energy audits**, and better monitoring. Government policy is now being guided by the report’s recommendations (Robic and Ancic 2016).

In other Eastern European countries, similar initiatives have been tried, such as the BEEN (Baltic Energy Efficiency Network) project\(^{41}\) which ran between 2005 and 2008 in Poland, Lithuania, Latvia, Estonia and Eastern Germany. The programme **sought to improve the energy efficiency of public-housing stock built between 1950 and 1980**. Families were able to pay for improvements to their homes over time through the savings on their subsequent bills and, in some cases, with financial help from local authorities. However, this project poses the same dilemma discussed at the beginning of this section, namely, which groups should be the target of interventions to improve household energy efficiency? Initiatives like BEEN, in part because of the methodology used in their implementation,\(^{42}\) lead low-income families into debt, sometimes beyond their means, without consistent financial support from public authorities.


\(^{41}\) [www.been-online.net](www.been-online.net)

\(^{42}\) Each tower block voted by simple majority whether they wanted to join the scheme or not. This can lead to situations where nearly half of residents, having noted against for financial reasons, are nonetheless forced to participate.
Spain, for its part, has lacked a coherent strategy, based on a careful analysis of the issues, and has instead opted for knee-jerk measures in order to meet its EU obligations on emissions reduction. The centre-right government of the Partido Popular passed Law 18/2014 which included energy-efficiency measures and created the Energy Efficiency Fund (Fondo de Eficiencia Energética, in Spanish) with financial contributions from the energy companies. The money was set aside for improving energy efficiency in buildings, transportation, industry, services and farming. As it stands, such measures have not been fully implemented, whilst the programme itself is facing numerous legal challenges from energy providers.

Catalonia has also made attempts to comply with EU directives on energy efficiency. Since 1 June 2013, energy certificates have been mandatory for existing buildings and dwellings that are being sold or rented. A certificate is also required for parts of any building over 250m² which are occupied by a public entity and regularly frequented by the general public. Nonetheless, the target of all new buildings achieving near-zero energy consumption by the end of 2020 is still far from being met. However, there are examples at local-government level where energy-efficiency measures form part of a broader paradigm shift. For example, the municipality of Rubí implemented a programme called Rubí Shines (Rubí Brilla, in Spanish) which included both awareness-raising measures and concrete intervention in different areas, including housing, schools, industry, public services, amongst others.

Finally, it is worth taking a deeper look at some of the potential pitfalls of a myopic focus on energy efficiency as a means to reduce energy poverty.

On the one hand, there is the landlord/tenant dilemma which refers to the problems of improving energy efficiency in rented accommodation. Specifically, the problem relates to whether landlords or tenants should be the main beneficiaries of such measures. In the UK, certain mechanisms for sharing savings between tenants and landlords exist, such as the ‘warm rent system’. Here, tenants make a single monthly payment for rent and energy bills. This allows social-housing operators to cover the cost of energy-efficiency measures whilst the amount saved in energy use can be passed on to the tenant through reductions in the single payment. There are also discounted bill schemes and the Energy Company Obligation. As previously explained, this links repayments for energy-efficiency measures to the dwelling and not the user. The 2011 Energy Act also made it illegal to rent a property after 2018 with an Energy Performance Certification below E.

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43. ‘Fondo Nacional de Eficiencia Energética’ (IDAE 2014).
44. ‘300 empresas declaran la guerra al fondo de eficiencia energética’ (Monforte 2016a).
45. ‘Certificació d’eficiència energètica d’edificis i inscripció dels certificats al registre de certificats d’eficiència energètica d’edificis de Catalunya’ (Generalitat de Catalunya 2013).
46. ‘Dossier Rubí Brilla’ (Rubí Brilla 2015).
In the Netherlands, a similar initiative has sought to respond to this problem (Vringer et al. 2015). Landlords do not normally benefit directly from improvements in energy efficiency. However, the national system of property evaluation, which regulates the maximum price of social rents, now includes a property's energy efficiency rating amongst its criteria. For their part, tenants benefit from the improved energy efficiency of their homes in the form of lower bills.

As ever, the question of how to finance such schemes remains a pertinent one. In some cases, Public-Private Partnerships (PPPs) are still being used to finance large infrastructure programmes, such as city-wide building renovations or the construction of new social-housing stock. 48 Many research centres and other organisations have highlighted the dangers posed by this type of funding model in relation to other sectors. 49 The use of PPPs also raises the issue of who should pay for the associated costs and if it is even desirable to open up the sector to further concentration of wealth and bigger profits for business, whilst the basics rights which are the object of this report are further co-opted to serve private interests. 50

This, in turn, poses the question of whether delegating these responsibilities to private actors, or to mixed entities, is a good idea in the first place. PPPs only hand the private sector more power whilst it continues to deny responsibility for disconnections, the build-up of debt, unethical selling practices and harassment of customers for non-payment (problems that are not automatically solved by the introduction of energy efficiency measures.) One possible solution would be to hand over responsibility for improving energy efficiency to public administrations. In this way, policies can be developed that deal with the problem across different sectors, instead of focusing solely on vulnerable families or only on the electricity sector. Such a policy could be accompanied by large-scale awareness-raising campaigns, whilst taking full advantage of the possibilities for job creation and implementing measures which tackle the root causes of energy poverty.

48. ‘EPEC - The European PPP Expertise Centre’ (European Investment Bank, undated)
49. Eurodad (2015), the Debt Observatory in Globalisation and Counter Balance (2014), as well as the Bretton Woods Project (2016) raise concerns over high costs, lack of transparency and opaque accounting associated with PPPs, as well as the creation of illegitimate debt and of the financial risks borne by the public sector.
50. Juncker’s investment plan, which seeks to attract a total of over 300 billion euros through 21 billion euros of public investment in PPPs throughout the EU, has received proposals from the Catalán government for integrated energy-efficiency measures in cities, as well as for developing smart grids, most of which have been contracted out to Endesa Distribución, for a sum of several million euros. Meanwhile, this private company continues to cut electricity supplies and refuses to answer important questions about the current state of the electricity distribution network.
6.3.b Financial Support

Financial support to alleviate the hardship caused by high energy bills takes different forms in different member states.

Some measures seek to help with budgeting, defer payments, offer small loans or different payment methods. In the UK, energy suppliers must offer a series of payment options to indebted families. They are also required to ensure that repayment plans take account of the customer’s ability to pay. Schemes to assist with budgeting or to defer payments also exist in Belgium, Hungary and Greece. In the Netherlands, the law gives local authorities powers to help with unpaid debts.

The direct payment of late bills is also a common practice and is favoured by the EU over reduced tariffs (see section 6.3.c):

Direct payments may enable market prices to prevail for consumers and enable vulnerable consumers to interact with the competing suppliers on the same terms as other consumers. This may reduce stigmatisation vis-à-vis the energy suppliers that might be associated with social tariffs. Moreover, the recipients of direct financial support may have an incentive for energy-efficient behaviour as they would pay market prices and should thus be more aware of how much they spend. (VCWG 2013)

Winter payments and other financial support

The Warm Home Discount scheme has been operating in the UK since 2011. It provides an annual discount of 140 pounds on bills, financed by electricity suppliers with over 250,000 domestic customers. Companies are obliged to offer this payment to pensioners whose income falls below a certain threshold as well as to other vulnerable groups, as defined by the company. However, the payment is not applied automatically for these groups who instead have to pass through several bureaucratic hoops in order to benefit from it. Other measures are paid for directly from the public purse and, unlike the Warm Home Discount, do not exclude certain vulnerable people. The Winter Fuel Payment, for example, is available to all households with someone over 60 years of age. It takes the form

52. www.deddie.gr/en/upiresies/eualwtoi-pelates
54. www.gov.uk/the-warm-home-discount-scheme
55. https://www.gov.uk/winter-fuel-payment
of a payment of between 100 and 300 pounds that does not have to be used on energy bills but that in 40% of cases is put towards gas and electricity. The Cold Weather Payment,\textsuperscript{56} on the other hand, is a weekly payment of 20 pounds made to certain households, including vulnerable groups like pensioners and the unemployed, when the temperature is forecast to drop below 0°C for one week or more.

Austria also has a fund for helping pay electricity bills, the Electricity Assistance Fund. It is operated through the main electricity supplier, Verbund, but also has links to Caritas, a charitable organisation. The payments can also go towards paid advice and auditing services for consumers.\textsuperscript{57}

In Bulgaria, all households whose income is below the minimum wage can access the Winter Supplement Programme to help with heating bills. Whilst in Hungary, support for low-income households is provided through local authorities.\textsuperscript{58}

Since 1990, France has a system of solidarity funds, funded principally with public money, to help with the energy bills of low-income families who find themselves unable to pay. Before Law 24/2015 was passed, Catalonia operated a similar system, with a solidarity fund financed almost exclusively from the public coffers. However, nearly four fifths of the 10 million euros in the fund remained unspent, despite there still being many families in energy poverty unable to pay their bills. The Barcelona Metropolitan Area also approved a fund of five million euros in 2015 to help with energy bills, of which only 15% was ever used. Another 5 million euros was added to the fund in January 2015. In July 2016, the Catalan Federation of Local Authorities and the regional government struck a deal which handed over 4 million euros to municipalities to cover their spending on help with energy bills in 2015.

Andalusia also approved an emergency programme in 2014 to guarantee a basic supply of energy to families facing financial hardship. This took the form of a six-and-a-half million-euro solidarity fund. The money was made available to local authorities so that local social services could decide how best to distribute it. Meanwhile, the Galician regional government has launched an electricity voucher system for vulnerable families, with a total budget of 1.5 million euros. Beneficiaries receive payments of between 180 and 300 euros—depending on the make-up of the family—even six months to help with energy bills. In the same year, the Basque regional government also set aside 200,000 euros to help families unable to pay their energy bills (Page 2015).

\begin{flushleft}
\textsuperscript{56} www.gov.uk/cold-weather-payment
\textsuperscript{57} www.verbund.com/en-at/about-verbund/responsibility/social-issues/electricity-assistance-fund
\textsuperscript{58} ‘Local Action Plan on Fuel Poverty. Plovdiv area, Bulgaria’ (REACH, undated).
\end{flushleft}
Direct payments to help with bills do not, however, solve the problem of debt that has already been accumulated. The usual response to families unable to pay their bills is to find a way to make sure that they can be paid. **However, the pertinent question from a rights-based approach is how can their rights be guaranteed despite the fact that they cannot pay; or even, what kind of model would not create unaffordable bills in the first place?** In the final instance, it is also worth asking why public funds should be spent on measures that do not ensure that public money reaches those most in need. By guaranteeing energy companies’ profits, even when they are involved in disconnections or other abusive practices, models based on financial support ignore the root causes of energy poverty or, potentially, perpetuate them. If a disconnection causes financial support to kick in, including the support offered by solidarity funds, then public money may actually act as a perverse incentive for the supplier to continue the practice.

Alternative measures could include **not applying interest to unpaid bills and not charging certain fees, like reconnection charges.** Another strategy would be to **avoid labelling people as debtors just because they do not meet the criteria for financial support.** These users may be experiencing temporary difficulties and should not be marked for life as ‘non-payers’ which only serves to turn short-time difficulties into long-term problems. Finally, **mediation, where families can negotiate a partial or total write-off of their debt,** often through social services, should also play a role.

**What happens to the accumulated debt?**

In the UK, it is not possible to negotiate even partial debt write-offs. The only available options are payment plans that spread out the cost, or debt cancellation only in cases of error. In Belgium, payment plans often end up being unaffordable for families because their specific socio-economic situation is not taken into account. Instead, the total debt is always divided into twelve payments to be made the following year on top of the bills for that period. If the family cannot pay, they have to find a new provider. However, the debt is not written off and instead sold to a debt-collection agency, or flagged to the authorities, who may then begin legal proceedings or repossessions.

In both countries, families with debts are forced to install **prepayment meters** which prevent them acquiring more debt because when they can no longer afford energy, they simply have to go without. This cynically creates the impression that the situation has improved because there are fewer disconnections and less debt.

In Catalonia, the Alliance Against Energy Poverty (Alianza contra la Pobreza Energética, in Spanish) has helped numerous users to negotiate total debt write-offs
since 2014. Instead of representing people on a case-by-case basis, their strategy is collective action which seeks to guarantee universal access and prevent the disconnection of vulnerable families, even when they cannot pay, as foreseen by Law 24/2015. By signing the aforementioned agreements, the alliance seeks to give people a second chance, free from debt, by forcing energy suppliers either to take on the debt or apply significant discounts to bills.

Often absent from the debate about financial-support measures is the overall cost of energy, not just to the consumer, but of the system as a whole. High prices are concerning both because some families find them unaffordable, generating debts which the public sector often has to cover, and because, in the case of Spain, there is a lack of data on the real cost of generating, distributing and selling energy (Cotarelo 2015). **If high prices are caused by a lack of transparency, then measures to tackle the problem of energy poverty need to go beyond financial assistance with bills.**

### 6.3.c Protection for Vulnerable Families

Different EU countries count on different support measures and mechanisms to protect vulnerable families. These models often see social protection as a tool to provide short-term assistance in emergencies, in contrast to energy efficiency which is viewed as a longer-term remedy. However, some of these social protection measures can in fact perpetuate underlying deprivation over the long-term if they do not also address the structural power imbalance at the heart of the relationship between suppliers and consumers.

Different social protection measures include, *inter alia*, reduced tariffs, guaranteed minimum supplies and protection from disconnections. The EU, however, identifies improving competition in the sector as a key tool for protecting consumers:

> Price comparison tools are increasing in popularity as a means for all consumers to find and switch to the best, most appropriate tariff. This should also benefit vulnerable consumers (even if they do not switch) as it encourages competition. (VCWG 2013)

This report will deal with the type of price comparison tools being referenced here in the section on information and empowering users, as they do not constitute pre-existing protections upon which users can rely.
I. Reduced and alternative tariffs

Reduced tariffs for low-income or vulnerable consumers are special rates which, in theory, take account of their specific circumstances.

Reduced tariffs in Spain: an effective protection measure?

Until 2014, the reduced tariff for vulnerable people in Spain (known as the *bono social* in Spanish) was frozen at the level of electricity prices before 1 July 2009, thus shielding it from market fluctuations. This meant that the discounted rate was calculated by comparing the amount owed at current prices with the same amount at 2009 prices and then subtracting the difference. Royal Decree 216/2014 scrapped this methodology. The reduction is now calculated by discounting 25% from the variable kilowatt hour price available to domestic consumers for any given time of day (this is known as the *Precio Voluntario al Pequeño Consumidor*, or PVPC, in Spanish).

The reduced tariff is available to anyone with a contracted usage of under 3 kilowatts as well as to all large families. Those receiving the minimum pension and those who can prove that all members of the household are unemployed are also eligible. The 2009 legislation on reduced tariffs was meant to introduce a threshold based on per-capita household income, but no government has actually put this into practice. The centre-right *Partido Popular* used its absolute majority in parliament to reject two attempts by the opposition to enact such a measure. The government’s own minister for energy even drafted a measure which would have linked the reduced tariff to a family’s income. However, the bill was shelved, leaving the only national measure to reduce energy poverty without legislative effect (Page 2015).

The number benefiting from the reduced electricity tariff has dropped by nearly 18% since it was introduced in 2009. According to the Spanish competition and markets authority, the *Comisión Nacional de los Mercados y la Competencia* (CNMC), the number of claimants has fallen from 3 million in 2009 to 2.5 million in 2014.60 Despite this, the number of those eligible has risen: there are now more households where everyone is unemployed, for example. However, the number of people with a contracted energy usage of under 3.3 kilowatts has fallen by 26%, which is the sole measure by which the reduced tariff is

59. www.minetad.gob.es/energia/bono-social/Paginas/bono-social.aspx
60. ‘¿Cuántos usuarios se benefician del bono social de electricidad en España’ (CNMC 2014)
applied automatically. Moreover, only the main energy companies are allowed to offer the reduced rate, meaning those with other suppliers have to go through the bureaucratic process of changing operators to be able to benefit. Another issue is that consumers are automatically flagged when they no longer fulfil the eligibility criteria but there is no automatic detection of those who are eligible but have not claimed. The CNMC stated in 2016 that only 41.69% of those eligible for the reduced rate were receiving it.

The Royal Decree Law 6/2009 states that the funding for this measure should come from the companies who own power-generation facilities, with each company paying an amount proportionate to their market share. However, a Supreme Court judgement from 7 February 2012 declared this provision unconstitutional because it included only some power-generation companies and was therefore discriminatory. The cost was then included in connection fees. The Royal Decree Law no. 9/2013 changed this to transfer the costs to the parent companies of vertically integrated suppliers, according to their customer share and number of connections to the network, to be defined annually by the CNMC.

Since then, the big five electricity companies have appealed against all the annual payment orders and challenged the methodology used to calculate their shares in the Supreme Court. Just as the sentence was about to be handed down, the companies argued that a recent ruling by the European Court of Justice (ECJ) should turn the court’s decision in their favour. In the ECJ case, the French government had asked for clarification over a similar reduced tariff for the gas sector. The court ruled that it was the state’s responsibility to bear the costs of the measure to avoid discriminating between companies.

On 26 October, the Supreme Court ruled in favour of the electricity companies. It also decreed that consumers should have to pay back the cost of the reduced tariff since 2014, a total of almost 200 million euros a year. The ruling, however, did not deny that the government has the right to force all or part of the electricity sector to fund reduced tariffs but, rather, argued that it had not presented sufficient justification in this case.

61. Corporate groups involved simultaneously in the generation, distribution and sale of electricity. 62. ‘El Supremo defiende que las eléctricas no paguen el bono social’ (Monforte, 2016b) 63. ‘El Supremo tumba el régimen de financiación del bono social en favor de las eléctricas’ (El periódico de la energía, 2016)
Other EU member states have reduced tariffs with tougher guarantees than in the Spanish case.

In France, for example, reductions of between 40% and 60% can be applied to both gas and electricity bills. These reduced tariffs (tarif première nécessité, or TPN, in French) are available through all electricity suppliers and in 2012 helped nearly 4 million users. In the gas sector, where they are also available through all suppliers, 300,000 people benefited in the same year (VCWG 2012). Those receiving specific benefits, such as certain pensions or incapacity benefits, are eligible, with an income cap based on the number of people living in a household. Reductions can be anything from 71 to 140 euros for electricity and 23 to 185 euros for gas. They are funded through contributions from the energy companies to the public electricity authority which are then passed onto all consumers in their energy bills.

Italy has two reduced tariffs, one for electricity, in place since 2005, and one for natural gas, in place since 2008. Discounts are means tested, taking into account a family’s income, financial assets and the make-up of the household. In order to be eligible, household income cannot rise above 7,500 euros a year (or 20,000 euros if the family has dependents). Discounts of between 71 and 153 euros for electricity and between 20 and 264 euros for gas are applied according to who lives in the home. Around a million households benefit from the reduced tariff for electricity (17,000 of those because of serious health problems) whilst 600,000 people receive the reduced gas tariff. The cost is passed on to all consumers through their energy bills.

In Belgium, 8.2% of domestic consumers receive the reduced tariff for electricity and 8.5% for gas. It is also paid for through contributions applied to consumers’ energy bills. All suppliers are able to offer the reduced tariff and all consumers have the right to request it. However, it is applied automatically to certain venerable groups defined in law (Thomson 2012).

In Portugal, it is the supplier of last resort who is responsible for supplying the most vulnerable through a special tariff determined by the national regulator, the ERSE. Those eligible include claimants of incapacity or unemployment benefits, recipients of the guaranteed minimum income or pension credits, as well as large and low-income families. Those who meet the criteria receive a discount on their gas and electricity bills of around 30%. It only applies to permanent residences and is limited to a contracted usage of 4.6 kilowatts, in the case of electricity, and an annual consumption of 500m$^3$, in the case of gas. Since July 2015, the reduced tariff in Portugal has been applied automatically using information held by the tax and social security authorities. In the case of

64. ‘Bonus elettrico’ (Autorità per l’energia elettrica il gas e il sistema idrico, undated)
65. ‘Descontos Sociais de eletricidade’ (EDP, undated)
the electricity sector, it is fully paid for by the energy companies. Private providers also offer discounts, fixed by the government, to the aforementioned vulnerable groups through a publicly funded programme called Apoio Social Extraordinário ao Consumidor de Energia (ASECE).

In Greece, there is a reduced domestic tariff, known as KOT, to help vulnerable groups, particularly those on low-incomes, families with three children or more, the long-term unemployed, the disabled and those reliant on life-support equipment. All suppliers can offer this tariff. In 2015, a 15% discount on bills was made available to consumers who are up to date with their payments through the country’s main electricity provider, PCP (of which the Greek state still owns 34.12% of the shares). Other suppliers have followed suit. Vulnerable people who benefit from the reduced domestic tariffs cannot, however, also receive this discount.

Hungary does not have a reduced rate for vulnerable people but does offer a discount on the gas bills of large families (those with three or more children). There are also additional metering, billing and payment options available to people with disabilities. The UK offers a similar type of support to people with disabilities through the Priority Services Register. This scheme offers advice on reducing energy consumption, financial help with new energy efficiency measures or appliances in the home and extra information about energy consumption for people with specific needs.

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Pre-payment meters

Pre-payment meters are meant to protect vulnerable families’ access to gas and electricity. An analysis of their use in two member states shows the extent to which they fail to meet this objective in practice.

In Belgium, when a household does not pay its energy bills, the supplier can decide, following an infraction notice, to expel the consumer after 60 days. If the consumer does not contract a new supplier, they will instead be serviced directly by the distribution network operator. Unless the customer is in receipt of social welfare, the new supplier will charge a penalty rate, which is slightly higher

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66. ‘Social Residential Tariff’ (Public Power Corporation S.A., undated)
67. ‘15% Discount’ (Public Power Corporation S.A., undated)
69. Note: there are important differences between regions: Brussels-Capital, for example, does not make use of this measure.
than the market tariff. This charge, which is made twice a year aside from the normal billing process, is meant to ‘motivate’ users to pay their debts and return to the open market where cheaper tariffs are available.

If the customer again gets into debt, this time with the distribution network operator, and is unable to pay, a pre-payment meter is installed. In Flanders, this is paid for by the distribution network operator who recoups the cost through distribution charges on all consumers’ bills. In Wallonia, the customer has to pay 100 euros, unless they are in receipt of some form of social security assistance, in which case the operator pays. From this point onwards, and unless and until the customer returns to the open market, they can only purchase gas and electricity with a pre-paid card. When they run out of money and are no longer able to pay to recharge the pre-payment card, the consumer can activate an emergence reserve on the meter. However, when this reserve runs out, the person is effectively cut off from the network. These can be understood as ‘self-disconnections’, when a person is forced to cut themselves off from the network.

Similarly, in the UK, pre-payment meters are installed as a final resort when a family can no longer afford their bills and can no longer pay the debts they have built up. In principal, it is an option of last resort to be used when no other alternative is available. However, in practice, energy companies are quick to install them. The meter can be installed with or without the agreement of the consumer under the condition that it is placed in any easily accessible location and that the consumer is able to operate it (this excludes certain persons with diverse physical or mental abilities).

As a result, this measure has come in for heavy criticism from campaign groups like Fuel Poverty Action, who have condemned the meters for aggravating energy poverty for many families. People with pre-payment meters spend, on average, between 260 and 320 pounds more a year on energy than people who are billed. Families on prepayment meters are usually the most financially vulnerable to begin with. The Competition and Markets Authority (CMA) has

70. If the consumer meets the requirements for the reduced tariff, explained in the previous section, they can benefit from this discounted rate but only through pre-payment.
71. Except in the case of electricity meters which aren’t ‘empty’. In Belgium, 25% of electricity meters are ‘empty’ which means that, if the family does not have any money, they will not get electricity. The rest of the meters have a reserve of 10 amps available when the family stops adding money. However, in this case they are restricted to only using two electrical appliances at a time. All gas meters are ‘empty’.
72. www.fuelpovertyaction.org.uk
proposed changes to the system in order to reduce this disparity by 75 pounds.\textsuperscript{73} Nonetheless, this would still leave those on prepayment meters paying more than the rest of the population.

The previous examples again show how support for vulnerable people is not allowed to interfere with the functioning of the market. Instead, energy pricing systems should allow for reduced tariffs which provide stronger guarantees. Prices should also rise progressively, in line with the amount consumed, as already happens in many places in the water sector. This not only incentivises reduced consumption but also takes account of families’ spending power and ability to pay.

\textit{Il. Guaranteed minimum supplies}

A guaranteed minimum supply is an assured amount of a resource considered to be the minimum required to meet a person’s basic needs. It is more common to find these guarantees in the water sector for several reasons: i) in the case of energy it is less clear how much constitutes a basic minimum; ii) although it is a basic need, energy is less necessary for life than water; iii) energy is generated by exploiting natural resources, which makes defining a minimum guaranteed supply, without touching on the question of what forms of generation are sustainable enough to guarantee universal access, controversial. It may also be risky to talk about guaranteed minimums given that energy is a resource mostly in private hands and it could, therefore, be in the interest of these private actors to fix a high minimum amount as a means of locking in future earnings. Or, if companies were made to bear the cost of the measure, there is the opposite risk of the minimum being set too low to sufficiently meet families’ needs to avoid high costs for suppliers.

It is a complex debate. Energy consumption depends on various factors: the energy efficiency of a given building (which in any case is often unknown), geographical location and electrical appliances in habitual use. In terms of electrical appliances, the energy required can be calculated based on basic needs, such as personal hygiene, cleaning, refrigerating and cooking food, communication technology, lighting, etc. Heating then has to be added, which can vary greatly depending on the type of building, but which ought to maintain an ambient temperature of 18°C in secondary rooms and 21°C in the primary room in winter, as per WHO recommendations, and between 24°C and 26°C in summer.

\textsuperscript{73} ‘Energy watchdog announces price cap for pre-payment gas and electricity metres’ (Sunderland Echo, 2016)
In Belgium, there was, until recently, a scheme to guarantee a free basic minimum supply of energy for all. Before it was scrapped by the new government, it provided 100kWh free per month to each individual in the place where they registered their official residence on the national population register. 100 free kWh per month were added to this per household, meaning a family of two received 300 kWh free, or family of four 500 kWh per month. The measure was funded by a charge on all consumers’ bills and worked to incentivise lower consumption. Currently, local authorities like the city of Cádiz are looking into similar measures. Policies of this type have already been implemented for water but are proving more complicated in the energy sector because of the dominance of the private sector which limits local authorities’ room for manoeuvre.

**III Protection from disconnection and the precautionary principle**

Disconnections are one of the biggest concerns for vulnerable people experiencing problems paying their bills. Living without an energy supply means not being able to meet basic necessities like cooking, lighting, heating, etc. The EU’s Third Energy Package highlights the need to avoid disconnections at critical moments or in difficult situations, but it leaves the details up to individual member states:

The definition may also refer, inter alia, to the prohibition of disconnection of electricity to such customers in critical times. (VCWG 2012)

Different measures to protect against disconnections rely on prior-warning mechanisms to ensure sufficient time and information is given to the user. The quantity and frequency of warnings vary by country. The winter respite is one measure commonly employed during the colder months. However, it is only a temporary solution given that electricity is essential to meet basic needs other than just keeping warm in the winter months. Finally, bans on disconnecting people who are reliant on medical devices also exist in some countries. A general ban on electricity disconnections is practically non-existent anywhere in EU, whilst, in the gas sector, protections are even weaker.

74. www.vreg.be/nl/gratis-elektriciteit
75. ‘El Ayuntamiento de Cádiz contará con una estrategia para el ahorro y eficiencia en edificios municipales y alumbrado público’ (Ayuntamiento de Cádiz 2016)
### Table 1. Protection against disconnections, by country

<table>
<thead>
<tr>
<th>Country / Region</th>
<th>Law / Measure</th>
<th>Rules on warnings</th>
<th>Protections for life-saving equipment (where no other protections exist)</th>
<th>Winter respite</th>
<th>Year-round protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalonia</td>
<td>Law 24/2015</td>
<td>Notification of non-payment, but not specifically of disconnection, with information about the rights of vulnerable people and the help available</td>
<td>Yes, through the precautionary principle (set out in law)</td>
<td>Yes, through the precautionary principle (set out in law)</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>Law 24/2013 pertaining to the electricity sector</td>
<td>Two unpaid bills can lead to a disconnection notice</td>
<td>Protection for people connected to life-support equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France&lt;sup&gt;76&lt;/sup&gt;</td>
<td>Brottes Law (and previous legislation pertaining to the winter respite)</td>
<td>Minimum warning period</td>
<td>For gas and electricity</td>
<td>(for water)</td>
<td></td>
</tr>
</tbody>
</table>

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<sup>76</sup> ‘LOI n° 2013-312 du 15 avril 2013 visant à préparer la transition vers un système énergétique sobre et portant diverses dispositions sur la tarification de l’eau et sur les éoliennes’ (Gouvernement de la République française 2013)
<table>
<thead>
<tr>
<th>Country / Region</th>
<th>Law / Measure</th>
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<th>Protections for life-saving equipment (where no other protections exist)</th>
<th>Winter respite</th>
<th>Year-round protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom (legally binding agreements)</td>
<td>‘Standard Licence Conditions for Supply’</td>
<td></td>
<td>Disconnections are only prohibited in winter for pensioners living alone or with minors, and in households with minors under the age of 16. (Advice states that all possible steps should be taken to avoid disconnections of other vulnerable groups like disabled people or those with chronic illnesses)</td>
<td>(Advice states that all possible steps should be taken to avoid disconnections of households with children aged under 5.)</td>
<td></td>
</tr>
</tbody>
</table>

77. ‘Electricity supply standard licence conditions consolidated’ (Gas and Electricity Markets Authority 2016)
### Energy Poverty and Management Models in the Water and Energy Sectors: Towards the Universal Right to Guaranteed Basic Supplies

<table>
<thead>
<tr>
<th>Country / Region</th>
<th>Law / Measure</th>
<th>Rules on warnings</th>
<th>Protections for life-saving equipment (where no other protections exist)</th>
<th>Winter respite</th>
<th>Year-round protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom (Voluntary agreements)</td>
<td>‘Energy UK Safety Net’[^78]</td>
<td></td>
<td></td>
<td></td>
<td>Agreement not to disconnect someone where the supplier knows the user is unable to pay their bills for health reasons, because of age or disability or severe economic hardship. (There are, however, self-disconnections due to the installation of pre-payment meters in indebted households.)</td>
</tr>
<tr>
<td>Belgium</td>
<td>‘Public service obligations for Distribution System Operators’, which is regulated by executive order[^79]</td>
<td>Winter respite</td>
<td></td>
<td></td>
<td>Disconnections are physically impossible (but there are self-disconnections through the use of pre-payment meters). A type of ‘precautionary principle’ is also at work as any disconnection has to be approved by a local advisory council.</td>
</tr>
</tbody>
</table>

[^78]: ‘Protecting Vulnerable Customers from Disconnection’ (The Energy UK Safety Net, 2016)

[^79]: One example is the most recent order in Flanders, from 19 November 2010, whose renewal is currently being debated.
<table>
<thead>
<tr>
<th>Country / Region</th>
<th>Law / Measure</th>
<th>Rules on warnings</th>
<th>Protections for life-saving equipment (where no other protections exist)</th>
<th>Winter respite</th>
<th>Year-round protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>National regulator, Communication of 22 February 2013[80]</td>
<td>Minimum warning period before any disconnection for non-payment and rules governing the number of warnings that must be issued before a disconnection. Fines exist for companies that do not follow these rules, to be paid directly to the affected user.</td>
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<td></td>
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<tr>
<td>Netherlands</td>
<td>Regulation of the Ministry of the Economy, Agriculture and Innovation of 27 June 2011[81]</td>
<td>Minimum warning period before any disconnection for non-payment and rules governing the number of warnings that must be issued before a disconnection. Suppliers are obliged to contact the user directly to offer a payment plan.</td>
<td></td>
<td>Winter respite</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tbody>
</table>

80. [www.autorita.energia.it/it/com_stampa/13/130222.htm](http://www.autorita.energia.it/it/com_stampa/13/130222.htm)  
The precautionary principle introduced in Catalonia with Law 24/2015 offers some of the best guarantees in the EU against disconnections of vulnerable people. It represents an important paradigm shift in favour of a basic guaranteed supply. This principle creates an assumption of innocence for families with unpaid bills (i.e. that they are not paying because they cannot afford to do so, not because they do not want to) and forces suppliers to check with social services before a disconnection if any vulnerable persons live in the household. This avoids wrongful disconnections and forces suppliers to provide information on disconnections to the authorities, which is invaluable in providing help to people who need it and is something that suppliers were previously refusing to do.

Source: Author’s own compilation

82. ‘Law 2007 LXXXVI’ (Government of Hungary 2007) http://njt.hu/cgi_bin/njt_doc.cgi?docid=110829.245949
6.3.d. Information and User Empowerment

For the EU, empowering consumers and ensuring access to information means widening the availability of technology, such as prices comparison tools (online and offline) and smart meters, in order to make consumers more aware of their energy use. New technology, more competition in the sector and a greater choice of providers for consumers are seen as the primary means to help consumers better understand, and take decisions about, their energy usage. However, the availability of such information does not, in itself, guarantee that the data are either accessible or accurate. Empowering users is not a purely commercial question given that greater choice does not necessarily mean better choices. Rather, it is a question of social justice.

Vulnerable families are often unaware of the best tariffs or of the rights and protections they should enjoy. Even if a variety of tariffs and commercial suppliers are available to them, vulnerable consumers are faced with the daunting task of comparing complicated figures, like the per-unit price of the energy they consume. It is sometimes stated that consumers make bad decisions. However, it is important to avoid blaming vulnerable people who may be making choices unfavourable to their circumstances because of a lack of information or because that information is hard to understand.

Better regulation of selling practices and the simplification of bills could instead be more effective strategies for empowering consumers.

Voluntary agreements on selling practices

**Belgium:** Code of conduct. The Belgian Energy Ombudsman has also made proposals to the Energy Ministry to ban door-to-door selling to residential and small-business customers.

**United Kingdom:** Voluntary code regulating selling practices and register of salespeople.  

**Italy:** Voluntary code of conduct prohibiting unfair prices.

83. Smart meters do not, however, always guarantee more and better-quality information. This is the case, for example, in Spain.
84. [www.energyuk.org.uk/customers/energy-industry-codes/energysure-code.html](http://www.energyuk.org.uk/customers/energy-industry-codes/energysure-code.html)
85. [www.autorita.energia.it/it/schede/C/faq-contrattinr.htm](http://www.autorita.energia.it/it/schede/C/faq-contrattinr.htm)
**Netherlands**: Voluntary code of conduct regulating consumer information and accepted selling practices. There is also a voluntary code of practice between suppliers and debt-recovery services.

**Voluntary agreements on billing information**

**United Kingdom**: Voluntary code of practice for accurate bills.

**Netherlands**: Voluntary agreement with the regulatory to ensure easily understandable bills.

**Other consumer information and assistance measures**

**United Kingdom**: Government-funded helpline for energy consumers (Citizens Advice Consumer Service).

Energy saving helpline.

Domestic heating helpline.

**Netherlands**: Consumer advice and practical help with energy issues.

The Vulnerable Consumer Working Group (VCWG 2013) has also recommended improving face-to-face consumer support in order to better identify cases of vulnerability. However, there will also be people who never have face-to-face contact with customer services, either because they are not able to or because they do not believe such support will solve their issue. Identifying vulnerable users through improved face-to-face contact can only

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86. www.energie-nederland.nl/gedragscode-consument-en-energieleverancier/
87. www.nvvk.eu/schuldhulpverlening/Convenanten
89. www.acm.nl/nl/publicaties/publicatie/5446/NMa-presenteert-richtlijn-voor-betereenergienotas/
91. www.energysavingstrust.org.uk/Organisations/Government-and-localprogrammes/Programmes-we-deliver/Energy-Advice-Service
92. www.homeheathelpline.org.uk
93. www.consuwijzer.nl/energie
play a secondary role, and is first and foremost the job of social services. The correct application of the precautionary principle, i.e. checking on users’ circumstances with social services, and the automatic application of reduced tariffs to those who are eligible, would avoid the need for face-to-face customer support to take on tasks which are the responsibility of agencies with the pertinent expertise in helping vulnerable people. Effective data sharing, enabled by agreements between the relevant parties, would greatly aid in this.

However, genuinely empowering consumers means resting control from the large energy companies who currently dominate the sector. Without correcting this power imbalance, none of the above-mentioned measures will be truly effective. User empowerment cannot be limited to tech-based solutions, whether those be better access to information, consumer phone lines, etc. Nor can real engagement come from policies intended to improve competition, such as price comparison tools, codes of conduct regulating selling practices, etc. Instead, empowerment has to be built on a rights-based approach that exposes bad practices and opens up wider participation in the energy debate.

One example of a policy rooted in this rights-based approach is ‘collective switching’ of electricity provider. In Austria in 2013, the country’s largest consumer organisation, Verein für Konsumentenschutzinformation (VKI), organised a collective change of supplier.

### 6.3.e Transparency

In private or public-private energy models, it is particularly difficult to harness transparency as a means of combatting energy poverty. Information sharing between the different stakeholders involved in service delivery is key to both detecting and following up on cases of vulnerability. Energy poverty watchdogs and information-sharing practices can prove useful in better identifying the underlying causes of the problem, raising public awareness and more fairly sharing out responsibility between stakeholders:

This could include, for example, data sharing between NRAs [National Regulatory Authorities] and the energy companies in the supply chain to ensure energy prices and bill components are monitored. The sharing of customer information (taking into account legislation on data protection) between energy retailers and other parties (DSO [distribution system operator] etc.) can be useful in maintaining up-to-date data on vulnerable consumers. The use of such data to create blacklists must be avoided. (VCWG 2013)

Such an approach, however, requires long-term work and a willingness to question some of the core principles of the prevailing system. Transparency is an area in which most en-
energy models in the EU are severely lacking. The current opaque situation has only been exasperated by the wave of liberalisation aimed at creating an internal gas and electricity market. Not only is price information unclear; information on disconnections and the state of the electricity network is often absent, as well. The general public has the right to this information but making it easily accessible could undermine the energy companies’ public image and corporate interests.

Alternative models do exist. In Saarbrücken, Germany, energy suppliers are forced to share their data with local authorities and government agencies. Whilst France’s Observatoire National de la Précarité Énergetique provides up-to-date analysis, information and research on energy poverty.

6.3.f Participation and Democratisation

In most EU member states, attempts to involve citizens in the management of their own basic services are still in their infancy. The level of citizen participation and democratic oversight depends on how open a given energy management system is to citizen control. This often comes down to the service’s governance model.

However, a desire for greater citizen participation poses a number of questions, not least: to what extent should such involvement be institutionalised? Or, is it preferable to maintain a level of independence so that civil society can transform our energy models into more inclusive systems? Sections 5.5 and 6.2.c have already highlighted how different pressure groups can create awareness about energy poverty, force the issue up the political agenda and make policy proposals to different levels of government.

In the UK, for example, these groups play an important role:

Accordingly we can see that fuel poverty policy in the UK would not have progressed so far without, for example, work by advocacy groups towards the better recognition of the needs of older people and the value of their lives; or work by lobby groups and key political actors pushing for the availability of information on the extent of fuel poverty and the establishment of mechanisms for bringing the interests of the fuel poor into decision making. (Walker and Day 2012)

The Fuel Poverty Action Group is also active on issues of energy poverty in the UK’s constituent nations of England, Wales, Scotland and Northern Ireland.

94. ‘Saarbrüker 4 punkte model’ (Saarbrüken, undated)
In Catalonia, the Alliance Against Energy Poverty (Alianza contra la Pobreza Energética, in Spanish) has worked to push the issue up the political agenda by demystifying the highly technical language common in the sector. Their collaboration with the anti-eviction campaign group, Plataforma de Afectados por la Hipoteca (PAH), has also shown the power of social movements to turn political demands into legislation. Deepening citizen participation, and the wider democratisation of the sector, requires the ability to apply pressure, raise awareness and negotiate in order to achieve the desired aims.

The Network for Energy Sovereignty (Xarxa per la sobirania energética, or Xse, in Catalan) has been working for the right to public involvement in energy decision-making, whilst raising awareness of the unequal power relations inherent in the current system. Both Xse and PAH have sought to expose the oligopoly enjoyed by the energy providers, who have rejected out of hand their calls for a guaranteed minimum energy supply. Faced with this intransigence, Xse has called for democratisation and the recognition of popular sovereignty over the energy sector. These and other proposals, including a call for the municipalisation of the electricity distribution network, were developed in a policy platform that Xse circulated during the Catalan local elections in May 2015. MAB’s experiences in Brazil, already covered in section 6.2.c, are another example of democratisation and of shifting the energy-management paradigm towards greater citizen participation and popular control. In this initiative, urban and rural activist groups, with links to international movements, act as a united front to oppose the privatisation and marketisation of energy, by jointly developing alternative proposals for a more inclusive energy model. Their founding document advocates direct opposition to multinational energy companies, price structures that favour domestic consumers, the repayment of illegitimate charges previously levied on consumers, an end to precarious work in the sector and changes in consumption patterns.

Switched on London – Municipal energy beyond public ownership

Since the 1980s, a cartel of private companies has come to dominate the energy sector in the UK, promising “healthy competition”, lower bills and better service. The reality, however, has been price rises leaving millions of people forced to choose

95. ‘Proposta energètica municipalista’ (Xse, 2015)
96. ‘Conjunto de propuestas para que la energía esté, de hecho, al servicio del pueblo brasileño’ (Plataforma Operária e Camponesa para Energia, 2009).
between heating and food in the winter months. Meanwhile, the profits of the Big Six (the name used for the oligopoly in the UK) have increased tenfold since 2007, whilst desperately required investment to deal with climate change has been sidelined, year after year. In this context, cities like Nottingham and Bristol have created their own not-for-profit, public energy companies to take on the dual challenges of energy poverty and climate change. These generate new revenues for the public sector and rest power from corporate elites and return it to ordinary people.

Similarly, Switched On London is a campaign that brings together advocacy groups with an interest in energy poverty, grass-roots organisations, unions and users experiencing energy poverty. Their vision is of a municipal energy system based on social justice and democratic control, with public participation at its heart, that goes beyond traditional models of public ownership. They want municipal energy that delivers a more socially just and environmentally sustainable electricity system.

The proposed publicly owned company would offer affordable tariffs to users and fair wages and working conditions to employees. New progressive pricing models would help vulnerable people afford their bills and non-payment would not be used as a justification for disconnections. Any profits generated would be reinvested into energy efficiency measures instead of going towards multi-million-pound profits for the private sector. For this reason, the campaign identifies transparency and open accounting as key principles, to be overseen by periodic public meetings in every borough of the city.

6.4. Water: Concrete Steps Towards the Human Right to Water and Sanitation

This report views water and sanitation as basic human rights and fundamental services. This section will seek to highlight some of the practical measures being taken within the contexts of different management models to guarantee these rights and protect vital services. It will also look at emerging models, in Europe and worldwide, which seek to meet the above-mentioned challenges with innovative management and ownership models, or by bringing powers back into the public sphere.

Water is inherently a limited resource. Various management models often coexist in the water sector. Historically, water resources were run publicly. However, in recent decades, there has been increasing pressure to privatise water and sanitation, particularly in the Global South, leading to the commercialisation of water. Water as both a public good and a human right has been undermined, exposing the failure of neoliberal policies in delivering these services to the most vulnerable (Casto and Heller 2012).

This global trend has affected the water sectors of different countries in different ways, resulting in a broad diversity of systems that stretch from the fully public (still the most common model worldwide, an example of which would be the Netherlands), to semi-public systems (such as France), to ‘purely private’ models (like in Chile).

The Dutch model is an example of public management in an EU country. Public water in the Netherlands has a long historical precedent and, in recent years, legislation has sought to safeguard public control of the system. In 2005, a new law came into force which only allows publicly owned companies to provide drinking-water services. As a result, privatising water companies is effectively illegal in the Netherlands. All ten drinking-water providers belong to local or regional governments. The country’s water boards are independent, government bodies which have existed since the 13th century. They manage the canal system, dykes and water quality, among other things, and form a key element of the water management system. The boards hold their own elections and can collect taxes to finance their services.

The Dutch experience shows the importance of progressive legislation in protecting water services. The case of Waternet is particularly interesting. This public entity was founded by the city of Amsterdam and the water boards of Amstel, Gooi and Vecht to deliver all water services in the area. The company is responsible for the entire water system and enjoys a degree of autonomy. It is owned and run by the Amsterdam local authority and the region’s water board; its mandate is renewed annually.

The French water management model

French water policy is set and coordinated at the national level but managed according to water basins. This model reflects the geographical reality of water resources, which pays little heed to man-made administrative boundaries, and integrates the tasks of supplying water for its various uses with the management of aquatic ecosystems, the prevention of pollution and risk reduction.
There is a clear division of responsibilities between public and private actors in the management of municipal drinking water and waste services. Local authorities can manage services themselves (directly or through a publicly owned company) or delegate this responsibility to a specialist operator, which can be either publicly or privately run (delegated management). In the latter cases, the length of franchises are determined by contract, usually of between 10 and 20 years. Currently, 61% of the French population receive their water, and 53% their sanitation, through this model. The system can operate as a leasing arrangement (where the local authority takes responsibility for investment and the operator the day-to-day service) or as a concession (where the operator is in charge of both).

In practice, the French model establishes a long-term relationship between local and regional authorities and a large operating group. Local authorities (and the communities they represent) award franchises in a theoretically competitive market and negotiates the price of water with the operator. The operator runs the service, but the local authorities remain ultimately responsible (Baudru and Maris 2002).

The French model places emphasis on the responsibility of local governments (municipalities or larger associations), budgetary rigour, transparency for consumers and quality of service. However, opening up operators to competition has resulted in a more controversial question, specifically: where do you draw the line when a public service is run by a private company?

At the local level, this free market only exists on paper. There is no real competition between the companies involved; in truth, the situation resembles much more closely that of an oligopoly. There have also been problems with financial oversight and a lack of transparency in the accounts of concession holders. Technical supervision by local authorities has not been as stringent as the legislation requires and information provided to users is often not as clear as it should be. The service stays in the hands of the companies holding the concessions who avoid financial risk by shunting investment costs back onto local authorities and leaving them to cover losses:

A particular danger lies in the fact that, in many contracts, investment costs are underwritten by local authorities who act as guarantors in loan agreements. Because of this, the cost of the debt is reflected in the price of water. When consumers pay their water bills, they are guaranteeing the concession holders’ profits, as, for the operator, there is no risk associated with the loan. […]

98. Data from SISPEA 2014 (Observatoire des services publics d’eau et d’assainissement)
In most cases, moving to a private concession leads to a rise in prices. The companies blame the higher prices on the cost of complying with European directives on the treatment of wastewater in urban areas, etc., which involves hefty investment. These stakeholders point to rising water prices worldwide, whilst pointing out that costs remain lower than for other services like electricity or telecommunications (Cirelli 2008).

The United States has a similar system to the French model. However, it does differ in one key respect, namely the large number of small operators who agree short-term contracts with local governments. Big multinationals look enviously at the American market. They argue that their economies of scale deliver higher returns justifying longer-term contracts.

In England, local authorities have no defined role. It falls to a national regulator to set a consumer price development index for the next five years. In 1989, Margaret Thatcher allowed the private sector into the industry and gave the green light to above-inflation price rises. This led to an average increase in bills of 95% in just a decade. Since 2017, companies have been able to choose their water supplier. This has opened up a new area to greater competition with non-traditional suppliers entering the market.

In Chile, 100% of the water supply is privately managed. There is a national market for water rights (based on the ‘right to pollute’ system) which allows competing operators to transfer rights to one and other. This model provides private companies with large incomes, proportionate to the length of their contracts.

Despite the move towards greater privatisation, the debate on water management is still a lively one that incites a great degree of interest around the world. Water is now widely considered a commodity, however it is managed. Nonetheless, this market-based logic directly contradicts the basic conception of the commons—be that water, air, fishing grounds or the ozone layer. It is simply not possible to define clear property rights for these shared resources. What is there to prevent countries with an abundance of water from exchanging it for other raw materials or for pollution rights? Increasingly, questions are being asked about the need for global regulation. The privatised supply and management of water resources is also being called into doubt. With massive corporations controlling this ‘blue gold’ through decades-long contracts, it is difficult to maintain any kind of public oversight or control (Baudru and Maris, 2002).

A study of 53 Spanish cities, representing 33.5% of the country’s population, by Martínez-Espiñeira (2009) shows that private suppliers charge higher prices than public ones. This clearly demonstrates that big corporations have the power to exploit their dominant market positions.
In Catalonia, 504 municipalities now manage their water in the public sector, compared to 394 which remain privately run (45 are under mixed administration). However, when analysing the data according to what percentage of the population is provided with water services privately, the picture changes drastically. 84% of the Catalan population lives in an area served by privately managed water suppliers, with only the remaining 16% serviced by publicly run water operators (Aigua és Vida 2014). This shows how private operators tend to focus on larger local authorities where contracts are more profitable and can generate greater revenues.

### 6.4.a. Quality and Availability of a Shared Resource

During the past decades, a worldwide debate has raged as to whether a public, participative system or a privately managed, concessionary model is most effective in guaranteeing the quality and availability of water. Some have argued that the private sector offers greater efficiency and value for money. However, this efficiency rarely takes into account social and environmental value, nor does it promote public participation or transparent management. In reality, this ‘greater efficiency’ often stems from poorer working conditions, lower environmental standards and the exclusion of vulnerable users. Public management, in contrast, allows for profits to be reinvested in improving water and sanitation systems and adapting them to the current needs of society. It places the needs of vulnerable people before private profit (PSIRU 2011).

Other studies point towards the impossibility of maintaining the quality and availability of this vital resource in a market system whose primary motivation is generating greater profit. One example is the construction of large dams which, while failing to resolve water shortages, have caused severe damage to the natural environment. Although this outcome runs contrary to the stated intention of such projects, it proves profitable for the corporations involved (Baudru and Maris 2002). Decisions to prioritise certain uses of water over others must prioritise availability to ensure an adequate and continued supply.

Water is peculiar in that it cannot be created or generated like electricity. This characteristic makes it all the more important that water is managed holistically, taking account of the environmental, economic and social sustainability of the entire water cycle. There can be no room for short-term solutions that make sustainability a second-order priority. Nonetheless, certain international organisations have made clear their preference for a neoliberal model. The World Bank, for example, stated in the 1992 Dublin Statement that water should be recognised an economic good.99 An economic model that prioritises the profits of multinationals and the reduction of public spending presupposes the privatisa-

tion of public services and common goods, including water and sanitation. Later studies, such as the Camdessús report (2004), have argued that traditional companies that take on water concessions need to be covered by measures to reduce the risk of investments. This means promoting public-private partnerships where the public sector takes on debt for infrastructure spending whilst the private sector keeps the profits (Basteiro and Serrano 2015). The United Nations Development programme estimates, in its 2006 Human Development Report, that private operators are 20% more expensive than their publicly owned counterparts.

**Official Development Assistance and water management**

The comparative advantage enjoyed by private water companies, used to administering a free resource, explains how two French giants, Veolia and Suez, have become masters of water resources around the planet. They earn net profit margins of between 15% and 25% outside of France, compared to 3% to 6% inside the country. Their dominance marks the conquest of a liberalised market on a global scale at a time when national markets in public services are being opened up to competition around the world (Baudru and Maris 2002, Cirelli 2008). The major Spanish water companies have also adopted similar strategies.  

A large part of Veolia’s (formerly Vivendi) fortune comes from overcharging for the salaries of specialist staff deployed around the world by the corporation. The company seduces humanitarian organisations, particularly at times of crisis. In countries with poor infrastructure, the multinationals pressure governments to accept their specialist technicians to advise on the construction of water systems. This usually leads to greater involvement by the private companies, on their terms, with projects supported by funding from the World Bank. In countries with good infrastructure, like Brazil, the companies try to push their services by arguing that they possess superior technical and administrative experience. Where they succeed, this usually results in privatisation or, more recently, public-private partnerships (PPPs). Their strategy is to gain control of public infrastructure by the back door by investing in small companies and peripheral treatment systems. In these countries, companies like Veolia use their subsidiaries, often employing local names or referencing public authorities, to attempt to divert attention away from the main company.

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100. ‘Las empresas españolas del agua deben emigrar a Latinoamérica’ (Atarés 2016)
101. ‘En la cloaca de Vivendi’ (Rebellión 2005)
These are not isolated cases. In the past, water-supply contracts have been removed from multinationals due to public pressure because of water pollution and the negative impact on public health. One flagrant case was the Agbar group in Uruguay. Even the Global Water Partnership, a think tank that favours privatisation, admits that the privatisation of Aguas de la Costa, a Uruguayan public operator, in 1997 was an example of privatisation gone very wrong and vindicates the public anger over ‘erroneous tariffs, poor service and recent problems with water quality’ (Basteiro and Serrano 2015).

6.4.b. Measures to Ensure the Accessibility of Water and the Protection of Vulnerable Families

Guaranteeing a minimum supply of water to everyone, regardless of their ability to pay, is essential to ensure a dignified quality of life for all. UN Special Rapporteur, Catarina de Albuquerque, has stated that access to water should not be impeded by any type of discrimination. Particular attention, she argues, must be paid to vulnerable and at-risk groups who cannot access this right on their own account.

The Human Right to Water and Sanitation means that water and sanitation must be affordable for everyone and that their cost must not be so high as to prevent anyone from accessing other basic rights. According to some measurements, this means that the cost of water should not be above 3% of a household’s income, or above 5% when including sanitation. With this in mind, it should be noted that places where water and sanitation services have been privatised see higher increases in bills, undoubtedly associated with private companies seeking to quickly recuperate their costs and earn a speedy profit (Basteiro and Serrano 2015).

Multinationals in the sector are pushing for a paradigm change of their own. For these actors, water should be considered a ‘resource essential to human life which must be managed as a scarce commodity of increasing value’ (PWC 2014). They argue that the current tariffs are insufficient to cover costs and carry out future investment whilst criticising the current fragmentation of the market, characterised by diverging rules and tariffs set by local governments. Instead, they argue for a ‘legislative and regulatory framework that brings stability and predictability to the sector and allows it to attract desperately needed investment whilst encouraging economically efficient consumption.’ As a means to achieve this, they propose a single compulsory methodology for calculating bills in order to encourage competition and reduce risk for investors in the sector, the creation of management structure across municipalities and single operators managing all phases of the water cycle.
However, as shown in section 5.2, the creation of national water regulators often leads to a loss of local control and further undermines public oversight. The global water movement supports local management because it can better adapt to the specific needs of a given community. This is incompatible with moves towards centralisation and cost standardisation. Not all stakeholders involved in the management of water resources understand the principle of ‘water pays for water’ in the same way. Most public operators take it to mean that water should be managed in a way that recognises its importance for maintaining human life and its cyclical nature as a resource (which also means implementing redistributive mechanisms). However, many private companies use the principle to justify ‘unavoidable’ price rises (Cirelli 2008). These private actors blame higher prices on the cost of complying with European directives on the treatment of wastewater in urban areas, which necessitates hefty investment, and point out that these costs remain lower than for other services like electricity or telecommunications (AEAS 2010, AEAS 2013, Fundación Aquae 2013). However, any large corporation requires a return on investment and a high profit margin; this may well be their true motivation for raising prices.

I. Reduced tariffs and affordable bills to protect vulnerable people

The ‘water pays for water’ principle means that everything that water provides, in terms of supporting human life, should be scrupulously paid back in the form of decontamination, water treatment, investment in better services, etc. This requires a high level of public supervision over operators’ accounts to prevent this vital resource being turned into a commodity or bargaining chip.

In theory, supply tariffs should be set to balance the objectives of guaranteeing the right of citizens to access water at an affordable price, incentivising lower consumption and covering the cost of the service. There are many models for meeting these goals. However, they do not all approach the principle of guaranteed access and lower consumption in the same way.

**Progressive tariffs** are an interesting case in point. These allow for higher costs for those who consume the most whilst guaranteeing lower prices for basic consumption. Such tariffs can vary according to the number of people in a household to ensure an adequate minimum supply as to ‘not penalise larger households or unfairly benefit single-person households’¹⁰² (Barberà 2015). Spanish local authorities where water is publicly operated, like Arenys de Munt and Seville, have turned to this type of measures. In Arenys de Munt, a monthly quota of up to 3m³ per person, or 100 litres a day, is supplied at a reduced price.

¹⁰² It may also be necessary to take measures to prevent the fixed component of the bill gaining undue weight as the number of people in a household increases.
Seville, this initial quota is 4m$^3$ or 130 litres a day per person. There is also a further reduction for monthly consumption below 3m$^3$ per person. In all such systems, it is advisable to set an upper limit for discounted quotas. This should reflect the amount required to meet basic needs and incentivise water conservation. Less progressive systems which do not discourage high consumption will fail to meet these objectives.

**Are discounted tariffs enough to keep prices low for vulnerable consumers?**

In Catalonia, the Catalan Water Agency (Agència Catalana de l’Aigua, in Catalan) offers a social water tariff to ensure that basic needs are covered. A reduced tariff is available to vulnerable households who apply and meet certain requirements.103 This tariff is applicable if the household’s consumption is under the initial quota of 9m$^3$ a month after the number of people in the household is taken into account.

However, in some cases these special quotas are not enough to cover basic needs. In others, the price for this initial consumption is not significantly lower than the base tariff or the amount does not adequately take into account the portion of the family budget going to pay water bills. Countries like France and Belgium also have discounted tariffs, but these are complemented by other measures to protect the vulnerable such as progressive pricing systems of the type already mentioned, or strict rules concerning disconnections. France is experimenting with a reduced tariff for families who spend more than 3% of their income on water bills (historically solidarity funds paid for by operators and the state have provided support.)104 The country also banned water disconnections in 2013. Flanders has a special tariff for low-income families, defined as those who receive certain benefits or income support. 200,000 of the region’s 2.3 million households receive the tariff, although some 30,000 of these families have been forced to negotiate payment plans or take payment holidays.105

Together with other measures to protect vulnerable consumers, discounted tariffs should be set low enough to ensure a minimum consumption of 100 litres per day, per person, and also fix an upper limit of consumption as a prerequisite for receiving the discount. The size of the discount should be enough to reduce the amount of a family’s income going towards water bills. Applying for the discount should not involve burdensome bureaucracy for vulnerable families (Barberà 2015).

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104. More details in section 6.4.b.
105. ‘Charging the poor for drinking water’ (Smets 2012)
The approaches taken in the Spanish municipalities of Arenys de Munt (Catalonia), Zaragoza (Aragón) and Medina Sidonia (Cádiz, Andalusia) are particularly noteworthy. In Arenys de Munt, as well as receiving a 50% discount on the fixed portion of the bill, vulnerable households benefit from a 50% reduction on the initial part of their consumption and 25% on the second. A social fund can also cover up to 100% of the bill. The water operator in Zaragoza offers different discounts which provide an average reduction of around 75% to the water bills of vulnerable families. The discount is applied to families of up to five people with a total income less than 166% of the minimum wage, set at €655.20 a month in 2016, with bigger reductions for large families. In Medina Sidonia, a 50% discount on the fixed portion of the water bill is automatically awarded to people earning under the minimum wage. No equivalent discount, however, is available on fixed wastewater costs. People who, despite this reduction, are unable to pay their bills are transferred to a basic minimum supply, explained in the section below.

Sewerage charges impact the total amount of a water bill. It is impossible to separate the cost of providing water from that of removing wastewater because both form part of an integrated cycle of water management. As such, the total amount of a water bill, including supply, sewerage and other charges, like taxes, should not exceed 5% of a household’s income for 100 litres per day, per person.

Finally, charges unrelated to the water cycle, such as payments to rent or maintain water meters or to support infrastructure investment, should be reconsidered. These raise the fixed portion of bills and, at the very least, should be waived for the most vulnerable consumers. The same is true of connection charges, which are often not covered by social security support.

II. Minimum supply

The World Health Organisation (WHO) has proposed guaranteeing a minimum supply for all as a means to ensure the human right to water and sanitation. According to the WHO, the amount of water used by a household depends on access to water sources. This must be taken into account when setting the level of minimum supply. In order to do this, we must first define access.

Basic access is understood as having a water source at least 1,000 meters or twenty minutes journey from the place of use and the ability to reliably obtain at least 20 litres a day for each family member. Basic access also means having enough water to drink and cook,
wash hands and maintain basic hygiene; it does not include laundering clothes or washing. This limited level of access has serious consequences for human health.

Intermediate access is defined as having use of 50 litres of water a day, available less than 100 metres or five-minutes journey from your dwelling. This level of access meets the needs defined in basic access as well as laundering clothes and washing and, consequently, has a low negative impact on human health.

Finally, optimal access means having an average of 100 litres of water per person, per day, available through several taps and thus meeting all needs for drinking, cooking and hygiene.

**Guaranteed minimum supply in Medina Sidonia**

Medina Sidonia in Cádiz, Andalusia, has taken the unprecedented step in Spain of guaranteeing a minimum water supply to all users. The board of the municipal water operator approved a proposal for a guaranteed minimum supply in order to create a more inclusive water management model, without compromising on efficiency. The measure provides 3m$^3$ of water a month, for free, to people who meet certain qualifying requirements with the social security agency.

This model is financed by setting aside 3-4% of the company’s turnover, around €40,000, to pay for the measure. Currently, around 170 people out of the 45,000 consumers supplied by the operator qualify, 3.7% of the total. Qualifying cases are identified in two ways: either the consumer requests support directly from social services or public authorities take the initiative to apply the support directly to the family, even if the latter is not aware of their eligibility for this benefit.

The Medina Sidonia model is, of course, supplemented by other measures. It uses a progressive pricing scale to encourage water conservation: the initial two bands of consumption are priced much lower than the subsequent ones. Disconnections are also prohibited, even when bills go unpaid. The municipality provides in-person customer support at local level and runs extensive public-information campaigns in order to better inform users about the different options available to them, such as payment plans for families who need more flexibility to pay their bills.

106. ‘Propuesta de acuerdo sobre reconocimiento del derecho humano al agua y suministro vital al consejo de administración de Medina Global’ (Medina Global 2014)
Providing a guaranteed minimum supply is not, however, uncontroversial. Supplying any amount of water for free can be seen to contradict the principle of ‘water paying for water’. Any minimum amount may also not be sufficient to actually cover basic necessities. One solution, in keeping with Medina Sidonia’s aim of guaranteeing the human right to water and sanitation, is the model adopted by Arenys de Munt. Here, the municipality does not only offer a cheaper quota for initial consumption to everyone, but also provides extra discounts to the most vulnerable which can cover up to the entirety of the bill. The city of Zaragoza also offers an initial quota at a reduced cost and provides discounts to vulnerable people (although these do not cover 100% of the bill). The local authority also has a policy of never disconnecting a consumer for not paying water charges.

**III. Protection from disconnection**

Water disconnections, although less common than in the gas and electricity sectors, are used by many water operators in cases of non-payment.

Disconnections are a barrier to realising the key principles of the human right to water and sanitation: availability, quality, non-discrimination, etc. None of these principles can be applied when a water supply has been disconnected. In Spain, various water management models, mostly in the public sector, have sought to follow ‘no disconnection’ policies, despite the lack of national legislation to prevent the interruption of services. Good examples include those places already mentioned, like Zaragoza, Arenys de Munt and Medina Sidonia, as well as Aigües del Prat, in Prat de Llobregat or the local authority of the city of Cádiz.

The experience of the Canal Isabel II in Madrid offers a counterexample. In this case, the public water operator disconnected 400 vulnerable people for non-payment. The campaign group Red Agua Pública argued that a Supreme Court decision from November 2015, which defined water charges as a tax and not a payment for a service, meant that such disconnections were illegal.¹⁰⁷

Examples of ending disconnections at national level include France and the Law 24/2015 in Catalonia. In both cases the key was negotiating with the water companies so that they respected the ban and guaranteed service to everyone on a non-discriminatory basis. This also allowed for the immediate reconnection of those whose service had been discontinued, whilst sanctions were introduced for non-compliance with the regulation.

¹⁰⁷ ‘Los cortes de agua por impago son ilegales’ (García 2016)
In France, the Brottes Law has made the ban on disconnections a reality, despite the opposition of the large water multinationals like Suez and Veolia. These two companies were fined in 2014 for not complying with the law and were forced to repay between €5,000 and €10,000 to those affected by wrongful disconnections. Some families have received support from NGOs and social movements in order to undertake judicial proceedings against the companies. Up until now, only Suez has pledged to stop cut-offs.

Only a few countries have introduced wide-ranging legislation on water disconnections. Despite important progress with energy supplies, many EU countries still only regulate the notice period and terms of disconnections. For this reason, there remain some truly gratuitous cases, such as Portugal, where there were 42,000 disconnections for non-payment in 2013.108

**IV. Incentivising water conservation**

Incentivising water conservation is another principle that both promotes the affordability of water and protects vulnerable families. Section 6.3.a explained how energy efficiency is key to reducing the underlying causes of energy poverty, such as poor home insulation and/or inefficient domestic appliances. Better energy efficiency not only saves money but also promotes more socially equitable and environmentally sustainable consumption.

In the case of water, a holistic approach to the entire water cycle must guarantee access to this vital resource, but not at any cost. Instead, emphasis should be placed on rationalising consumption, both to protect the environment and preserve the resource for future generations. Many organisations, public bodies and companies have taken up this message, through information campaigns and programmes aimed at the general public as well as the agricultural, industrial and service sectors.

Isolated measures are not enough. *Any approach to water conservation has to take into account all aspects of resource management and cost recovery. For example, prices rises in the fixed portions of bills discourage water conservation by consumers and negatively impact those who find it most difficult to pay without turning to social services or other financial support programmes. In order to make water services more affordable for the majority of the population, it is essential to reduce the fixed components of bills.* This could be done either be setting a ceiling on fixed bill items or by adapting them to a sliding scale based on a household’s consumption (Barberà 2015).

108. ‘Agua pública o privada, la batalla social que recorre el viejo continente’ (Marcos and Fernández 2014)
One case that highlights the problems associated with fixed charges on water bills is that of the municipality of Barcelona, whose water services are privately run. A hefty portion, around 54%, of basic bills corresponds to these fixed charges, many of which may in fact be unlawful. This makes it very difficult for families to substantially reduce their bills by using less water.

Finally, responsibility for saving water also lies with operators who need to do more to reduce leakage and waste in the system. The experience of Arenys de Munt is particularly noteworthy: following remunicipalisation, the town has managed to reduce leakage from 40% to 30%.

V. Bill payments and solidarity funds

Solidarity funds are a commonly used measure in EU countries to help vulnerable families pay their water bills in situations where they have fallen behind with payments due to economic hardship. Unlike most solidarity funds, which offer support with electricity and gas payments, those which offer support with water bills usually receive a sizeable slice of funding from the service operators, although the exact proportion varies.

The main private operator in Catalonia, Agbar, manages the Agbar Solidarity Fund which is 100% paid for by the company’s profits. The business has no qualms about regularly flaunting the programme in the media as an example of good corporate social responsibility. Although these funds are usually managed by the social security agency, it is unclear who is eligible for financial support. Many of those who would qualify are often unaware of the fund’s existence or, if they are, the number of bills that can be covered. Being a voluntary measure, Agbar sets the fund’s parameters according to its needs, which calls into question its underlying fairness.

Nevertheless, operators in Catalonia have now signed up to agreements which oblige them to take on the debt of families who cannot afford to pay or to offer significant discounts on payments. Because this type of agreement is regulated by Law 24/2015, the commitments made are mandatory and carry legal weight. However, the agreements that have been concluded thus far are much less ambitious when it comes to the other obligations which can be placed on suppliers through the legislation. For example, they rarely address the issue of guaranteeing supply to vulnerable people, regardless of their living situation. In any case, measures that force operators to assume families’ debts are

109. ‘El que el rebut de l’aigua no explica’ (Aigua és Vida 2013)
110. ‘Aigües d’Arenys: pros i contres de la remunicipalització’ (Puig 2014)
111. All the company’s contributions to its foundations are tax exempt.
based on a social-assistance logic and do not guarantee the fairness that this report advocates.

Every year, €2 million are placed at the disposal of France’s **Water Solidarity Fund** which offers direct payments of €10, €20 or €30 towards water bills. The fund is financed through contributions from suppliers and is managed through the social security system. However, assistance is not applied automatically, and a large section of the French population are unaware of its existence. The **Housing Solidarity Fund**, created in 1990, is managed by each region or local authority. This fund helps deprived households with accommodation costs, such as water, gas, electricity and telephone services. It allows water bills to be paid on time through close collaboration between local authorities and water companies. In 2008, water companies dealt with over 33,500 applications for aid through the Housing Solidarity Fund. 77% of the financing comes from the Housing Ministry, 0.5% from water suppliers and the rest from voluntary contributions.

This report has consistently argued that **help with paying bills does not solve the root problems of water or energy poverty.** Although operators’ contributions to solidarity funds are to be welcomed, these should not be used to whitewash the reputations of these companies.

Another issue with this type of funds is that they usually have an upper limit on total payments which, in turn, is used as an erroneous measure of the scale and dimension of the energy poverty problem. However, the necessary tools for vigorous monitoring are rarely available (only a few countries, like the UK, have developed serious methods of measuring the extent of the problem.) In Wallonia, Belgium, the social security system covers anyone who cannot pay, without any limits, although always with the stipulation that the person be in a vulnerable situation. However, not all countries enjoy such a comprehensive social safety net.

In the final analysis, solidarity funds are a reactive tool: they intervene only after debts have been accumulated. In cases where such funds are not available or cannot intervene, vulnerable consumers can still be left deeply indebted and without recourse to extricate themselves from the situation. It is a problem that reappears each time a vulnerable family starts earning again, making it all the more difficult to obtain a genuine second chance.

### 6.4.c Information and User Empowerment

Users of water and sanitation services have the right to access information about the service. The human right to water and sanitation means not viewing these people as con-
sumers or individual customers of a private business, but rather as users of a basic service which is provided to the population collectively.

Access to information, therefore, allows for a better understanding of how a service is managed, who the different stakeholders are and what rights, responsibilities and obligations apply to each of them. Systems that restrict the flow of information deny users an active role in managing resources. This is why the human right to water and sanitation must include the right to information. Users are already more aware than ever before of their consumption and its impact. Better information is vital if they are to take greater responsibility for the management and use of shared resources. This also means abandoning the so-called ‘culture of experts’, which impedes access to knowledge and excludes those who are not specialists. Instead, other means of collectively building understanding and taking decisions need to be found, based on the principles of consultation and democratic consent.

Few management models in the private sector meet the challenges of providing information and empowering users. However, it is worth highlighting the case of Berlin, where a referendum was held to remove the secrecy surrounding the sale of 49.9% of the public water operator to Veolia and RWE. Concerns existed about the company moving from being governed by the legal framework for public administrations to being administered under private company law, with the associated issues of professional secrecy and information restrictions (Basteiro and Serrano 2015). Following the referendum, remunicipalisation became a central issue in the local elections and, following the vote, the newly elected senate purchased the privately held shares. Despite the changes promised by remunicipalisation, both in public access to information and user empowerment, the new management is still suffering from the opacity of the previous administration. The case demonstrates the complexities involved in resting control from powerful private actors.112

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**Faced with austerity, Greek citizens speak up for water rights**

The cases of Athens and Thessaloniki, Greece’s two largest cities, are victories for the public management of water. In a period of austerity, spending cuts and privatisations, the struggle for water has become one of the most pressing social and political debates in Europe. Whilst the EU recommended further privatisation,

112. ‘Berlín, la remunicipalización del agua lucha ahora su democracia’ (Revista Pueblos 2016)
Initiative 136 proposed buying 40% of the shares in EYATH, Thessaloniki’s publicly run water and sanitation company.

The campaign was called Initiative 136 because this was the amount, in euros, that each person with a meter would have to pay to ensure the public, cooperative management of the company in an economically healthy and efficient way. (The company made a 20-million-euro profit in 2011.) On 18 May 2014, Greek citizens rejected the privatisation proposed by their government, as the Council of State decreed that a change in management would be illegal.

A second victory came in May, when the Supreme Court decided that the privatisation of the Athens water company was unconstitutional because it contravened two articles relating to the protection of public health.

6.4.d Transparency

The previous section, dealing with access to information, is closely linked to the objective of winning more transparent management models. The opacity of water systems in many countries impedes effective and efficient service delivery and undermines public accountability.

The struggle against the commercialisation of water also highlights the need for clear, publicly available information about the service. Certain data or information cannot be withheld in order to protect competition or market position. The Aarhus Convention on access to information and public participation in environmental matters states that access to information relating to the environment, in this case, water, must be available to all interested parties and all those affected by environmental decisions.

Private models create barriers, not only to accessing information but also to entering the sector. The concentration, and the natural monopoly, of water services create anti-competitive practices amongst private operators: corruption, cartels, joint ventures, demands for compensation when contracts are not renewed, etc. Other bad practices include systematic contract renewals, concession fees (entry rights) and shady tax behaviour. This is also a problem created by the asymmetrical access to information and the power imbalance between the regulator (where there is one) and the provider (PSIRU 2011).
Water and the (lack of) transparency in France

SEDIF (Syndicat des Eaux de l’Île-de-France) is a public body that manages drinking water for the 149 municipalities of the Paris region. Founded in 1923, SEDIF is responsible for the production and distribution of drinking water to four million customers in seven départements. The concession holder is Veolia, a private company.

In the rest of France, 55% of all concessions are held by either Suez or Veolia, despite the fact that, each year, 700 contracts come up for tender. An investigation by the High Council for Public Services found that only 5% of contract renewals are awarded to a new provider. This concentration of service provision in the hands of a few companies is one of the main contributing factors to water overbilling in large cities. Corrupt practices and a lack of transparency are also common, as is collusion between private companies and public authorities:

Whilst direct management by the local authority considerably limited infrastructure and network investment […], turning over services to concessions, above all associated with ‘entry rights’, had an immediate impact on the finances of local authorities and, in some cases, on the mayor’s own income (Cirelli 2008).

Up until the 1950s, Veolia Environment managed, together with Suez, no more than a third of municipal water services in France. Today, thanks to a recurrent policy of overbilling, corruption and bribes to trade unionists and public officials, this figure has risen to 80%, together with significant interests in global markets. According to Jean-Luc Touly, a worker at Veolia (then Vivendi) and trade unionist:

These companies [like Suez and Veolia/Vivendi] signed contracts with the [French] government for up to forty years. These were followed by down payments, in the form of long-term loans with very high interest rates, for investing in the service. Because these loans were not subject to any type of audit, the money wasn’t only spent on infrastructure, but on whatever the government wanted. (Rebelión 2005)

The repayments, of course, fall to service users who pay back both the loan and the interest through their bills. The system of ‘entry rights’, eliminated by François Mitterrand in 1993, allowed politicians to give the impression of rude financial health whilst also carrying out investment. Because these were long-term loans, the repayment ended up falling to the next consortium (Rebelión 2005).
Touly revealed fraud involving Jean-Marie Messier, head of Vivendi between 1994 and 2002, of nearly five billion euros. The executive, who was fined millions of euros by the French government for financial crimes, is now a persona non grata in the French business world. The scam exposed by Touly involved the overbilling of nearly 8,000 contracts for maintaining Paris’s water systems. Messier, who was worried about having to return the funds to the state if discovered, had dispersed the money through a maze of banks and financial companies around the world, in order to cover his tracks. Investigators discovered that the syphoned-off capital had then been used by Vivendi to buy Universal Studios.

As this and other cases highlighted in this report show, real transparency means going beyond measures that merely seek to avoid corruption, where private company law does not make this impossible. For example, a more ambitious and inclusive approach would be to create internal and external transparency mechanisms. These could take the form of adequately resourced bodies charged with ensuring accountability within management structures, or, of external bodies that involve civil society and create genuine public oversight of the operator’s activities.

Understood in a broad sense, transparency means creating and disseminating knowledge of decision-making, internal management structures, water quality, details of the water cycle and sustainability, as well as information about past and future privatisations and their consequences. Access to this information must be guaranteed for all citizens and accompanied by awareness-raising campaigns that build engagement.

6.4.e. Participation and Democratisation

In one way or another, everybody is involved in managing water: we benefit from the resource and shape its use and management. As such, citizens should be able to participate in strategic decision-making. With ample participation, citizens are able not only to push for better services, but also to become promoters of good water management and greater social justice. This is overlooked by private management models. In reality, the private management of water runs counter to citizens’ interests as these are rarely compatible with the profit motive. Furthermore, private management reduces the process to a purely commercial relationship between the rights’ holder (the local authority) and the operator (the private company), where citizens are mere spectators, customers bereft of agency or decision-making power.
Whilst Catalonia has trended towards greater privatisation, the rest of Europe is heading in the opposite direction, with water being returned to public management. Remunicipalisation is one of the formulas being used to recoup public control over this vital resource. By taking advantage of the end of contracts with private companies who managed the service in previous decades, remunicipalisation allows local authorities to take services back into public management.

There has been clear growth in the number of remunicipalisations: between 2010 and 2014, cases doubled compared to the period between 2005 and 2009 (Lobina et al. 2015). There are many reasons for this trend: broken promises in public-private partnerships, corruption, poor-quality service, unsustainably high bills or lower investment levels than initially promised.

Many municipalities have decided to end contracts despite the associated costs, in the form of fines or compensation to the private operator. The new wave of free trade agreements, such as the Transatlantic Trade and Investment Partnership (TTIP), the Comprehensive Economic and Trade Agreement (CETA), between the EU and Canada, and the Trade in Services Agreement (TiSA), between 23 countries, including the entire EU and the USA, poses a new danger. Many local authorities around Europe believe these agreements will make remunicipalisations more complicated and costly. Arbitration courts and dispute resolution mechanisms in the agreements allows multinationals to sue states because of regulatory changes, lost earnings or lower profits. CETA, for example, will make the remunicipalisation of water, energy and other local services more difficult and increase the pressure on towns and cities to privatise public services.

In some cases, a local authority simply floating the idea of remunicipalisation, or opening up negotiations, creates a healthier local democracy. Private operators can even see that their interests are at stake and take steps to rectify the problems that have caused public dissatisfaction:

> Just the threat of remunicipalising a service is itself a means of promoting competition in the sector and of securing the renegotiation of contracts on a fairer basis. This was the case in Lyon where, in January 2006, as the contract with Veolia was coming to an end, the city council managed to negotiate a price cut of 16% by threatening to take water back into public management (Cirelli 2008).

France, one of the countries with the greatest experience of privatisation, has made significant moves towards remunicipalisation during recent years. In cities like Paris and Grenoble, remunicipalisation has improved access and service quality whilst guaranteeing the human right to water and sanitation and the sustainable management of the resource. It has also led to greater democratic governance and a price reduction of 25%. However, this is not to ignore the costs involved in some cases, where the previous operators have won
compensation from local authorities (Babiano 2016). Closer to home, other places, like Terrassa, have faced similar problems. This is why it is of the utmost importance to monitor privatisation closely: it may turn out to be very costly to reverse.

Public-public partnerships and public-community agreements, although they are models from outside the EU, offer two experiences of grass-roots democratisation. These can be found around the world, but especially in Latin America.

Public-public partnerships can help foster remunicipalisation efforts and promote effective governance in the public sector, although they need to be underpinned by popular mobilisation as a driving force in the process. In this model, two or more public bodies cooperate to improve one of the stakeholder’s capacity and efficiency in providing public water and sanitation services. The aim is to bolster the capacity of the body receiving the support. In practice, there are several specific objectives: training and developing human resources, technical support, building institutional capacity, financing water services, increasing public engagement, etc. This management model also promotes the exchange of knowledge and experience between stakeholders and encourages mutual assistance. These partnerships can also benefit from the involvement of non-state actors like NGOs and trade unions, who can both provide new perspectives and help implement decisions (Hall et al. 2009). Public-community agreements are a specific type of public-public partnership which involve a high level of community involvement.

These public-community agreements seek to strengthen traditional governance structures and manage shared resources in an area. Their basis is cooperation between public authorities (the state, municipalities) and traditional community bodies as a means to guarantee, for example, the human right to water and sanitation. Not only do they recognise the traditional governance structures of marginalised communities, and protect these forms of management, but also acknowledge that such systems are often the only viable models adapted to meet the specific needs of these rural localities. The Public-Community Agreements Platform of the Americas (Plataforma de Acuerdos Públicos Comunitarios de las Américas, in Spanish) brings together many actors involved in these programmes. In the case of water, they are represented in the Latin American Confederation of Community Water and Sanitation Services (referred to by its Spanish acronym, CLOC-SAS). Over 80,000 such community water and waste organisations exist in rural and deprived urban areas of Latin America and the Caribbean, supplying safe water and, in some cases, waste services to over 70 million people. These community organisations deal with both the technical problems of designing and building water and waste systems and with the social challenges of strengthening community management, developing local skills and administering, operating and maintaining the system in a sustainable manner.
7. Conclusions and Recommendations

This final section of the report will set out the conclusions of this study in the form of recommendations. Our aim, as throughout the report, is to take stock of the lessons learnt through this research and to make recommendations that develop the universal right to water and energy whilst guaranteeing citizen participation in the management of these services.

A shared challenge in different contexts across EU countries

The increasing visibility of energy poverty in public debate and on the political agenda at EU level, and in different member states, is to be welcomed. Different countries agree that there is a lack of effective protections because the present management models and legal frameworks do not allow for them. A clear and coherent strategy is still lacking, as is official recognition that energy poverty cannot be resolved without questioning the current water and energy models, either at EU or member-state level. The current landscape contains models which are moving towards greater privatisation and models moving in the opposite direction, towards remunicipalising services. The relative strength of these trends depends on the history and socio-economic reality of each member state, region or municipality.

Universal rights versus welfare and the stigmatisation of those affected by energy poverty

Welfare models which focus only on those people suffering from energy poverty tend to stigmatise the very people they claim to be helping. They seek solutions based on the individual circumstances of the household (rent, quality of housing, etc.) without addressing structural factors (energy prices). It is imperative that we move beyond this status quo. Water and energy systems underpinned by the guarantee of a basic minimum supply tackle energy poverty at its root. Accepting water and energy as universal rights means ensuring access for all. Isolated measures will not deliver this objective. Instead a deep transformation of management models is required.

Solidarity funds and direct payments to cover bills are not enough. These measures only begin to deal with the problem when debts have already been accumulated. They act like
a sticking plaster: instead of improving people’s lives in the long term, they reproduce the same structural inequalities. Preventative measures, such as improving energy efficiency, must be accompanied by universal guarantees for users. These can then be expanded according to the specific needs or vulnerabilities of each family (progressive or reduced tariffs, banning disconnections.) The current legal framework urgently needs adapted to enable these kinds of measures and serve as a basis for a total overhaul of the present system.

**Protecting lives versus protecting the market**

Neoliberalism and the patriarchy defend a market logic through a number of mechanisms, such as growing inequality and a culture of fear and exclusion that undermines our rights. This model values competition over sustainability and people’s basic needs. It also prioritises speed and the short-term maximisation of profit over the considered, in-depth reflection required to address a problem like energy poverty. The task of looking after people cannot be confined to the space left after the market has been taken care of. Alternative models are not only possible; they are urgently needed. Systems built on human rights and social and environmental justice already exist and work well. These are the examples we must learn from.

**Global transformation of management models versus the simplistic public-private debate**

Public management does not, in and of itself, tackle energy poverty. Much less does it automatically guarantee the active participation of citizens. We have to move beyond the simplistic debate over public versus private management. Different experiences of remunicipalising water or energy have emphasised the need to involve citizens in deciding how resources are managed, something historically denied to them. This kind of transparency and public engagement acts as a motor for change in the models which they oversee.

**Subjects of change: stakeholders with a growing impact versus empowered consumers**

The EU promotes the empowerment of consumers as part of a wider market logic. But it is social movements, NGOs and the wider public who need the tools and capacity to influence the political agenda. Treating service users as individual consumers is nothing but
a manoeuvre aimed at depoliticising the problem of energy poverty and turning it into a purely technical issue. People affected by energy poverty should not be victimised but rather recognised as active participants in, and not objects of, any measures designed to assist them. The solidarity and collective consciousness created by community organising must also address the global impact of these injustices.

Social and environmental justice

The debate over new management models must also extend to how natural resources are extracted and distributed. Sustainability and human rights in those countries from which the EU extracts resources must also be part of the discussion. What is required is a sense of shared responsibility towards both people and planet.

Energy poverty must be understood as a manifestation of global social and environmental injustice, and not a glitch or error in the functioning of the market. It is the tip of a much larger iceberg. Those who sustain and maintain the conditions for life are hidden below the waterline, particularly those involved in looking after the environment or in the unpaid labour of care and mutual aid. This iceberg is in danger of splitting apart from below. For this reason, guaranteeing the right to basic supplies of water and energy is not only urgent, it is unavoidable.
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