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Electricity – commodity or common property? Implications of people's attitudes for the forming of sustainable energy policies.

1 Introduction

This is a people's movement directed towards our authorities!

It is soon time to start using the good old H3 tariff. Those who use less than 20.000 kWh (which covers what is most necessary for sustaining a minimum standard of living) should obtain electricity at a very low price, while those who use more should pay more. In this way we obtain a more social profile so that those who over-consume and lives in luxury (*velter seg i luksus*) must also pay more for this per kWh. (Facebook 2010)¹

This quote is taken from a Facebook-campaign in Norway in 2010 promoting the re-introduction of a two-price system for electricity. The campaign came in response to the high electricity prices in Norway during the winter 2010, where some households were reported to be freezing. The site obtained 105 followers/likes. By using words like “social profile” and denoting luxury consumption as a phenomenon, the proposers connect the argument for a two-price system to a question of fairness. When they mention the “good old H3 tariff”, they refer to a former pricing system that was abandoned in the 1970s, which was a couple of decades before the deregulation of the electricity sector in Norway. In the former system, power (kW) and not energy (kWh) was used as a reference, which stimulated consumers to maintain stable consumption below the level defined as over-consumption. Nonetheless, by referring to the former tariff in this context, the actionists indicate that they regard the H3 as having been a system for fair distribution of limited electricity resources among households in Norway.

¹ The Facebook campaign was named “We who demand a differentiated electricity price now! (H3 tariff)”. (*Vi som krever differensiert strømpris nå! (H3 tariff)*).

The principle embedded in the present Norwegian electricity market, as in any kind of market, is that the pricing system is supposed to allocate scarce resources in the most efficient way. The Facebook campaign proposed that other purposes than allocating resources in an efficient manner could also be a premise for energy policy. A pricing system could seek to allocate resources in a fair manner. Moreover, an electricity pricing system could also potentially promote energy savings beyond letting the market equilibrium determine prices and demand.

The aim of this paper is to examine people's attitudes to electricity, electricity consumption and electricity policies such as pricing systems. We will also discuss the implications of the study in terms of how people's attitudes and perceptions could be used for informing policies towards a more sustainable consumption pattern. We draw on theories that assume that different types of logics might motivate behavior and that these logics could exist in parallel. Authors like Amartya Sen and Karine Nyborg make distinctions between logics that are based on an individual's self-interest on the one hand and logics that originate from an individual's interest as a member of society on the other (Sen 1985, Nyborg 2000). Sagoff (1988) introduced the dichotomy between a "consumer" logic and a "citizen" logic pointing to the same kind of duality in logics as Sen and Nyborg. Westskog et al. (2011) and their model on energy behavior develop the theories on logics further by emphasizing the dynamics between the individual, group and societal levels in determining behavior. This facilitates a discussion of the challenges involved when there are conflicting logics between these different levels. We will rely on the model developed by Westskog et al. (2011) in our analyses, and use our own empirical findings for discussing some of the implications for energy policy. We will argue that insight into people's own perceptions of electricity and the underlying principles they think should guide energy policies may be a key to forming policies that would have legitimacy in the population and produce sustainable effects.

2 The Norwegian context

Before the Norwegian energy sector became deregulated in 1991, the prices of electricity were determined by the authorities. Further, in the pre-liberal period, security-of-supply was a very important element of energy policies, and the costs for securing supply were mainly covered by the authorities not the consumers (Bye and Hope 2005, Bye and Strøm 2008). Vertically integrated electricity companies took care of production, transport and supply, and were required to conduct detailed energy planning. Here, the cost of increased production or transport would be evaluated against the cost of obtaining electricity savings at the user end,

and such analyses informed strategies for securing electricity supply. The electricity companies thus had incentives both for increasing capacity (production or transport) and for initiating measures to obtain energy savings on the user end (Eikeland 1998).

Also, in the period from the 1950's until the 1970s and 1980s many households in Norway were subject to a two-price tariff on electricity where the households paid a higher tariff per kWh if they exceeded a certain power level. Many households had a wattmeter in their homes, that is, a metering device which showed when they exceeded the level where they had to pay the higher price (NOU 1998). If the power level was exceeded, the households might have to pay 5 times as much per unit. The purpose of the tariff was primarily to limit the outtake of power because of the limited capacity of the electricity grid.

In 1991 the electricity market became deregulated in Norway when enacting the Energy Act. The purpose of the deregulation was to achieve higher economic efficiency in resource utilization (Bye and Hope 2005). With deregulation came competition between the electricity suppliers in the Norwegian markets and the consumers were given the opportunity to choose their energy supplier in a competitive market². Transport of electricity was not deregulated. The power grid is still a natural monopoly where the prices are regulated. Owners of the grid have a duty to deliver electricity to consumers irrespective of which energy supplier the consumer chooses. Both network companies and energy suppliers issue electricity bills to their customers.

One of the effects of the deregulation was that the duty to find solutions to environmental challenges became institutionally fragmented (Eikeland 1998). Further, both producers, network companies and suppliers through the deregulation, got economic incentives to increase the trading of kilowatthours. As Eikeland argues, this put a new kind of responsibility on the individual consumer to choose energy-efficient solutions (Eikeland 1998: 922)³, which would obviously be highly linked to the price level of electricity.

² There are per 12.06.12, 88 energy suppliers on the Norwegian Competition Authority's list of energy suppliers offering electricity to private consumers in Norway, see Konkurransetilsynet.no.

³ Eikeland holds that "a basic normative assumption underpinning any system of market based trading is consumer sovereignty – supply of goods and services are supposed to be driven by consumer demand. Indeed, both the UK 1989 Electricity Act and the Norwegian 1990 Energy Act state the major responsibility consumers have for choosing energy-efficient end-use solutions." (Eikeland 1998: 922).

In Norway 96% of the domestic electricity consumption originates from hydro power (NVE 2011). The large supply of hydropower has resulted in electricity prices that historically have been low compared to the rest of Europe and this is of course demanding for realizing energy saving potentials. After the deregulation in 1991, the prices of electricity decreased because of increased competition, but have risen with increased demand for electricity. However, the variation in the electricity price has also been high with certain periods with very high price levels (for instance in 2006 and 2008) and periods with much lower levels (for instance in 2007), see Bye et al (2010).

3 The logics behind energy consumption

We draw on theories that assume that there are a range of potential logics for action, and that several logics may exist in parallel. Thus people might embody several logics, and contextual factors, such as framing, influence what particular logic becomes activated in a given situation.

An early study by Sen (1985) points to two types of logics in people's reasoning. He makes a distinction between "well-being" and "agency". The well-being aspect is based on people's individualistic preferences or self-interests.⁴ The agency aspect are the opinions and beliefs that individuals hold for instance about different policies in a society. An individual's preferences could be based on both a well-being and an agency perspective. Later came Sagoff's book *Economy of the Earth* (1988) which focused on a similar dichotomy: Sagoff made a difference between a "consumer" and "citizen" logics. The consumer role is the position you take when you are primarily concerned with your personal or self-regarding wants and interests. As a citizen, in contrast, you are concerned with and behave according to the public interest. Thus as a citizen you focus on the community rather than your own immediate well-being. Importantly, the particular position of an individual may shift contextually (Sagoff, 1988: 8). Nyborg's (2000) "Homo economicus – Homo politicus" distinction has much in common with Sagoff's consumer–citizen dichotomy. Homo economicus is a person who maximizes her own well-being, whereas a person acting in the

⁴Sen (1987) makes a distinction between three different aspects of self-interest - self-centred welfare, self-welfare goal and self-goal choice. The difference between these three aspects is explained as follows in Sen (1987): "Self-centred welfare: A person's welfare depends only on his or her own consumption (and in particular it does not involve any sympathy or antipathy towards others). Self-welfare goal: A person's goal is to maximize his or her own welfare, and - given uncertainty - the probability-weighted expected value of that welfare (and in particular, it does not involve directly attaching importance to the welfare of others). Self-goal choice: Each act of choice of a person is guided immediately by the pursuit of one's own goal (and in particular, it is not restrained or adapted by the recognition of mutual interdependence of respective successes, given other people's pursuit of their goals)."

logic of Homo politicus puts herself in the role as an ethical observer, and tries to consider what is best for the society (Nyborg, 2000: 309–10).

As indicated, these authors emphasize that individuals might base their choices on another logic than the traditional self-centered economic one. They also point out that depending on the particular issue in question, different logics might come into play. When issues relating to policies come on the table, a homo politicus/citizen logic would often be the relevant one that guide behavior or views. The same would often be the case when people are asked to explain their opposition to policies and/or their willingness to act according to such policies.

Acknowledging the strength of situational and contextual factors as to what logic may come into play also have methodological implications, as we discuss below.

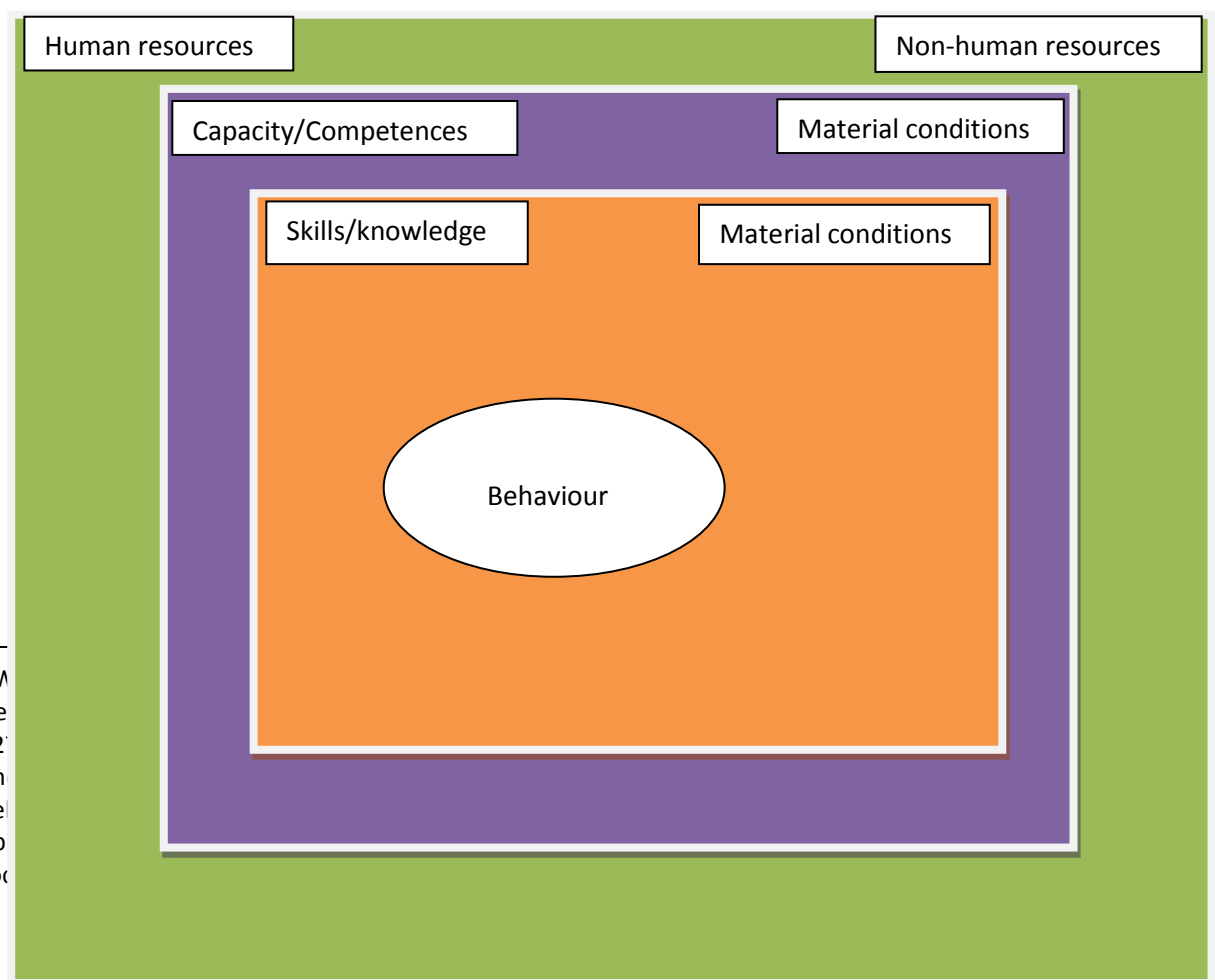
Westskog et al. (2011) develop a theoretical framework for understanding the various factors that lies behind a given action or behaviour performed by an individual. This model is useful for studying the degree of coherence between logics on different levels of society; the individual, the group and the societal levels. This multi-level focus makes the framework suited for interdisciplinary studies. Furthermore, we will argue that policies are more likely to be understood, accepted and have the intended effects on people's behaviour when there is coherence between the logics represented by the policies and the logics that individuals and groups operates within.

The model starts out by defining four factors that are important determinants for behaviour drawing on insights from anthropology, economics and psychology (Westskog et al. 2011). These factors, which are present on each level, includes i) skills and knowledge; ii) attitudes and norms; iii) beliefs, values and identities and iv) material conditions. The model thus incorporates the social and material structures and elements on the societal and group levels which surround and affect individuals when performing a given behaviour.⁵ Furthermore, for a given type of behaviour (e.g. turning on the light) and the practice in which the behavior is

⁵ It is important to note that there is a distinction between societal structures on the one hand, which are the existing elements that make up a society and, on the other hand, policies of various kinds which will influence but not determine behaviour. In the model, hard policies (taxes, regulations) fall into the category material conditions which may change people's logic for action (e.g. the smoking law affected people's morality when it came to smoking in private homes), or not. Soft policies often intend to directly affect societal norms and values, and may or may not succeed in providing such shifts.

situated (e.g. lighting routine in a home),⁶ each level may sometimes have a distinct logic for action. For instance, the logic on the individual level could be a consumer logic (e.g. not sorting waste for the purpose of time management). At the same time, the logic for action shared by the majority on the societal level (conditioned by infrastructure, shared norms and values etc) could be of a citizen type, such as by emphasizing the need for exploiting resources in an environmentally friendly way. The present study will examine various potential logics in the case of electricity consumption in Norway.

In total, these the four factors found on the societal, group and individual levels and the corresponding logics on each level interact and form what is termed a field of rationality. Here, the authors give priority to the position of the individual who performs the behaviour. The configuration of factors, levels and logics is what shape the field. The resulting field of rationality determines individual behavior. The model is reproduced in the figure below. Each level (individual, group and society) has a specific color signifying the logic present at that level for the behavior in question.



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Figure 1: *Factors influencing behaviour.*

When the logics at each level (the individual, the group and the societal) are coherent and known to policy makers, the implementation of policies attuned to the yielding logic is likely to be understood and potentially have the intended effects. This is so because the individuals/groups operate under the same logic as the one that the policy was formulated within. However, when the logics between the levels differ, a situation of conflict may arise (e.g. when the group logic is based on sharing and the individual logic is based on consumerist thinking). Furthermore, if policymakers erroneously believe that individuals are operating under the same logic as the one underling a given policy, the introduction of the policy might result in other behavioural effects than the policymaker expected, or no response at all. Throughout the paper we will bring several examples of conflicting logics that leads to misunderstanding of policies, protest and also other types of behavior than the policy maker aimed at.

In the following we will show how different logics come into play related to energy consumption and discuss which implications this have for views on policies and finally how this knowledge is important for the formation of policies.

4 Method

Our empirical data relies on use of qualitative data material in the form of focus group studies and in depth interviews. The focus groups and the in-depth interviews were analyzed using the qualitative data analysis software program NVIVO.

We arranged focus groups sessions in December 2009. The recruitment of participants was handled by Synovate via telephone using the telephone register or by contacting people that

have volunteered to participate in focus groups.⁷ We arranged 4 focus group sessions in Kirkenes and 4 in Oslo. All sessions had 8 participants in each. On each location we had age and gender specific groups; namely men aged 30-45, men aged 50-65, women aged 30-45, women aged 50-65 grouped together. The focus groups were led by a moderator from Synovate that used the focus group guide developed by the researchers to guide the discussions in the sessions. The focus group guide included questions on energy behaviour, what they did to save energy, the reasons for this what they consider to be a good life and how this is connected to their electricity use. To obtain material on people's various positions on electricity use and in relation to the consumer-citizen dichotomy and people's logics for action treated in the literature (see Section 3), focus group participants were asked the following two questions during the two-hour long events: i) Do you regard electricity as a market good in line with other goods or do you consider electricity as a (common) right?⁸ ii) Are people entitled to use as much electricity as they want as long as they pay for it?

We had two rounds of in-depth interviews. The first round was conducted in Asker (a town 30 km outside of Oslo) in February 2011. We conducted 9 interviews with both men and women and all living in detached houses.⁹ The main purpose of these interviews was to get customers' responses to different types of information on energy saving being tested out in a field experiment with Hafslund¹⁰. The interviews also covered general questions on energy behaviour and how electricity use was considered in a societal context. The material from the general part of the interviews is used in the paper. The second round of in depth interviews was conducted in August and September 2012 in Follo (30 km outside of Oslo) and Askøy (20 km outside of Bergen). We conducted 9 interviews with families living in apartments and detached houses. These interviews focused on practices around the use of displays to visualize energy consumption. These interviews also covered general questions on energy behaviour and how electricity was considered in a societal context. Semi-structured interview guides were used in both rounds.

⁷ For all participants there is a requirement for participation that they have not participated in focus groups during the last 6 months to be able to participate in a new one.

⁸ Both the moderator (externally engaged) and participants seemed to partly misunderstand the last part of this question regarding "right". But based on the responses to the two questions asked at the same time, which will be presented below, we feel confident that participants responded to the intended meaning, that is, whether electricity is a common property (to which there are certain rights and obligations).

⁹ The reason only individuals living in detached houses were interviewed, was because it was only households from this category that was included in the field experiment we did with Hafslund.

¹⁰ Hafslund is a major energy supplier in Norway serving most of the Oslo- area with electricity.

In the two rounds of in- depth interviews, we also included questions relating to the consumer-citizen dichotomy and other potential logics for action. The interviewees were asked if they regarded electricity as a right or a commodity in line with other commodities that are traded in a market. We also asked questions about the interviewee's views on energy policies for achieving reduced energy consumption and within these conversations we raised the issue of a two-level price system. Based on people's responses to these and other questions and issues that appeared in the discussions in the focus groups and in-depth interviews, we will in the following examine what kind of logics that guide people's attitudes related to electricity and uses thereof. We emphasize that the context for these conversations and discussions was not everyday life situations and that participants were aware of the sustainability agenda of this research. Also the phrasing of some of the questions, e.g. "are people entitled to use as much as they want", could have been interpreted as biased (e.g. sounding as "wasting"), thus leading people to give answers in a sustainable, normative direction. Sometimes the moderator even suggested explicitly if "wasting" (*ødsling*) is ok in some of the focus group rounds. To some extent we therefore assume that people's statements were influenced by their underlying expectation that normative, "right" answers would be appreciated. However, the variation in people's responses to these questions and the open character of the dialogues following an initial question which led to a range of new associations and issues, tell us that participants were far from directed to provide a certain type of answers. Finally, although we also invited for discussions on people's private uses of electricity, they were here asked to consider the larger picture of how electricity should be managed. Thus their answers can be seen as reflexive comments to systems and policies and not necessarily reflecting how they think when using electricity at home.

5 The logics - electricity as a common property or a commodity?

I am not a communist, but when it comes to electricity I am somewhat a communist. This is a national thing in my eyes. It's ours. It's our rivers that we have devastated. It's we who dammed.
1/Nikolai, male participant in Focus Group 8, Kirkenes, 2009.

In this section we present material on how Norwegians perceive electricity. The quote above illustrates a common view among interviewees and focus group participants; Norway's hydropower is a resource that belongs to the Norwegian population. Linked to the perception that hydroelectric power is a Norwegian, and also a clean and safe resource, people appear to

cherish their electricity (see Winther and Bouly de Lesdain (in progress) for a comparison between France and Norway).

From here on, people's responses and arguments can fruitfully be clustered in two main categories corresponding to the consumer and citizen logics, respectively. In the next section we will build on these findings on people's moralities and views on principles for management of electricity for discussing two distinct pricing systems and further discuss the importance of coherence between logics at different levels for sustainable energy policies.

The consumerist logic; Electricity as a commodity.

Many respondents held the view that people have the right to use electricity as much as they want as long as they pay for it. Lars (4/Group 3, Oslo): "As long as I pay for it, it is ok".¹¹ Ola, (2/Group 4, Oslo): We have the right to use a commodity that we pay for."¹² This view implies that people have no moral obligation to try to limit consumption. In line with a consumerist logic, this view follows the Energy Act of 1991 which is the legal basis for the current electricity market in Norway, and mainstream, economic thinking. The scarcity of the electricity product should be regulated by market forces in the same way as other products and services in a market economy. This makes electricity a product in line with other marketed products.

This group of respondents seemed to trust that potential environmental costs would be integrated in the electricity price (Group 3, Oslo).

Moderator: **So you think that we can use as much as we want as long as we pay for it?**

4|Lars: Yes, if nature is affected, one increases the price. Then one cannot pay for it and this is how one regulates.

Moderator: **So you think that the price increases if nature is suffering?**

4|Lars: Yes, and then one must find alternative ways to keep warm if one loses the job or something.

Moderator: (addressing the whole group): **Do you think that the price increases if nature is suffering?**

8|Helge: Yes.

4|Lars: Yes.

Others: Yes.

2|Kenneth: I think it is the price that must encourage people to save.

¹¹ "Så lenge jeg betaler for det så er det greit."

¹² "Vi har rett å bruke en vare som vi betaler for (og som vi får tilbud på)."

Following the logic of market thinking, the argument is here that if negative environmental effects occur because of electricity production or consumption, this should be regulated by increasing the price in accordance with the cost of the effects on nature (external effects in economics). However, some of the participants regarded regulations as unacceptable per se: Geir (2/Group 8, Kirkenes,): “There are enough restrictions in life. Don’t need restrictions on everything.”¹³ Economic liberalists would argue in the same way favoring the free market opposing government interventions. This view can be interpreted as belonging to a consumerist logic although in a more extreme direction and not in line with economic theories on effective allocation of resources.

In sum, these views follow a consumerist type of logic in terms of fully accepting that the price alone should determine consumption and trusting that the price would take into account potential environmental costs. They did not regard individuals as having a moral obligation to limit consumption although this was sometimes explicitly suggested by the moderator. Most of these responses came from men, though many men are also found in the next group to be presented.

The citizen logic; Electricity as a common property

When the moderator asked participants if people are entitled to use as much electricity they want as long as they pay for it, all the four female focus group started a discussion about conspicuous consumption. As an exception, Maria (8/Group 2, Oslo)¹⁴ said that she thinks people have “the right to use the current we must have” (*må ha*), whereupon another women said that it depends on what you mean by “need”. The last comment suggests that the level of consumption is a moral issue, and in the following, Maria did not insist on people’s right to use as much as they want as long as they pay. In all groups, male and female, we find individuals who argue for the need to limit exaggerated consumption:

Miriam: ”It shouldn’t be unlimited in terms of how much you can use. If there is a cabin which consumes as much as four households...” (4/Group 5, Kirkenes).¹⁵ Johannes: ”I have

¹³ “Det er nok begrensinger i livet. Trenger ikke begrensinger på alt.”

¹⁴ ”Jeg mener at vi har rett til å bruke den strømmen vi må ha.”

¹⁵ ”Det må ikke være at det er ubegrenset hvor mye du kan bruke, hvis det er en hytte som bruker like mye strøm som fire vanlige husholdninger”

even been to cabins in Geilo which have heating cables outdoors to avoid that the foundation becomes frozen” (4/Group 8, Kirkenes)¹⁶.

In Norway it has become rather common to build new cabins of considerable sizes, fully equipped with modern appliances. These are not for all, however, and a critique of rich people’s “cabin castles” is regularly referred to in the press. Thus many participants got associations to this kind of conspicuous discourse/practice when asked about people’s right to consume as much as they want. By referring to this discourse many participants distanced themselves from the issue. Some explicitly asked why they should try to save when the big people and the industry and even public buildings are over-using such as when street lights are kept on all the time.

A few of our respondents pointed to the need for sharing the electricity resource beyond the national borders. They referred to the observation (f.i, the climate problem) that many environmental problems cannot be solved inside national borders - emissions in other countries affects us and the overall environmental quality on earth. When asked whether electricity should be considered a commodity or a right, Hans responded: It is both things, clearly it is a commodity. But to the extent we help other people to save electricity, help other people in the world, then we have a plight to [save] as human beings and societies... It is a resource which can be used in another place instead of being wasted” (7/Group 4, Oslo)¹⁷ Mikkel in the same group followed up: “I think it is like this that the more I consume, the more they have to pull our energy from coal mines and the like in Europe. So unfortunately, it is connected, thus in the total environmental picture it is not unimportant what I use, I think. So that is why I think we should use energy with moderation and sensibility. Not sit and freeze, but also not waste (6/Group 4, Oslo).¹⁸ These statements point to the interconnection between Norway and other European countries with more polluting production. Based on this they express a moral obligation to be modest.

¹⁶ ”Jeg har til og med vært på hytter på Geilo som har varmekabler rundt grunnmuren for å hindre tele på hytta.”

¹⁷ ”Det er både og, det er klart at det er en vare. Men i den grad vi hjelper noen å spare strøm, hjelper andre i verden, så har vi plikt til å gjøre det som mennesker og samfunn på lik linje som vi skal spare eller bruke andre ressurser på en fornuftig måte. Det er en ressurs som kan brukes et annet sted i stedet for at det sløses bort.”

¹⁸ ”Jeg tror det er sånn at jo mer jeg forbruker, så må andre trekke opp energi fra kullminer og sånn i Europa, så dessverre så henger det sammen, så det er ikke likegyldig i det store miljøregnskapet hva jeg bruker tror jeg. Så derfor så synes jeg at vi bør bruke energi med moderasjon og fornuft. Ikke sitte og fryse, men heller ikke sløse.”

To sum up the empirical findings so far, some of our respondents seemed to fully accept the consumer logic underpinning the electricity market whereas many were concerned that some groups are over-consuming. By this, the latter group indicated that they do not regard electricity as an ordinary commodity in line with, say, sugar or coffee, where there are no limits to the level of consumption. Their indignation seemed to relate to appeals for reducing consumption. As a result, because some people are thought to over-consume, they find it unfair to ask ordinary people to save. We recall that Norwegian electricity is perceived to be renewable per se and few participants expressed concern for potential challenges connected with the local environment in the case of new production in Norway. Thus to most respondents, electricity is not linked to environmental issues, but rather scarcity (see below). The exception is the few who pointed to the interconnectedness between Norway and neighbouring countries. At least in the context where these questions were asked, they expressed a moral obligation to reduce electricity consumption. Connecting views on morality to consumption in the ways we find here, indicates that many perceive electricity as something different from a pure commodity following the rules of a consumerist approach. Notions of needs and fairness point back to a citizen approach where respondents are concerned with the community rather than their own immediate well-being. As shown by the quote in the introduction to this section, there also seem to be a view that electricity is to be considered a common property rather than a commodity.

6 Energy policy: Logics and pricing systems

“I think it would have been even better if it was like this in Norway that you could get cheap electricity for the first amount you use and then pay for your over-consumption. Then you would be much more concerned with that peak.”¹⁹

Interview with Per, Follo, Norway, August 2012.

Without the researchers suggesting a two-price system, Per brought up this issue when we ask about the display and to what extent he and his wife think that the information fulfills their needs. They gave this question the highest score (5). His reflections on the pricing system are in line with the views expressed by many of our respondents on how a fair and sustainable pricing system should be designed. Other respondents expressed opinions about the pricing

¹⁹ Jeg tror det hadde vært enda bedre hvis vi hadde hatt det i Norge slik at du kunne fått billig strøm for den første strømmen du bruker, og så betale for overforbruket ditt. Da hadde du vært mye mer bevisst på den peaken.

system that are in line with mainstream economic thinking. Below, we discuss these different views and relate them to the different logics discussed in the above section.

The consumerist logic; Prices as a means for achieving efficiency

A “consumerist” approach is in line with mainstream thinking within economics where the price system is viewed as a means for allocating the resources of a society in a most efficient way. Efficiency in economics is connected to scarce resources in a society and how well these are being allocated to meet the needs and wants of consumers. It focuses on getting as much (welfare) as possible out of the resources that are available at the lowest costs (see for instance Gravell and Rees 2004). Fairness is not an issue that is given much attention (see for instance Kahneman et al 1986) because the focus is tuned towards efficient allocations not justice (Baumol 1982).

An efficient price system for energy would be one where the price is equal across different sectors and users and that reflects the marginal costs of producing²⁰ it. Hence, the price of energy should not vary for instance according to how much a household uses of the resource since this would lead to inefficiencies (for arguments along these lines, see Bye and Hope 2005). These arguments against differing prices across sectors and consumers were clearly expressed by economists during the time when the Norwegian electricity sector was regulated (see for instance Bye and Strøm 1987 or Lorentsen et al 1979). Inefficiency was also one of the main arguments for deregulation of the electricity market in Norway in 1991 (see Bye and Hope 2005).

These perspectives on pricing of goods are in line with the “consumerist” arguments above; many respondents supported the principle that households should pay according to how much energy they use at an equal price for every kWh consumed regardless of how many kWh they use. However, as other voices in our material reflect, a price system could also be viewed as having supplementary function; one of allocating scarce resources and the burden of saving electricity in a fair manner.

The citizen logic; a norm for appropriate levels of consumption

A premise for policies for allocation of scarce energy resources is often that the burdens of scarcity should be allocated between the citizens in a fair manner. Several studies have documented that when people perceive burdens to be unfairly distributed, their own

²⁰ Or for hydro power – of producing one more kWh of new electricity.

motivation to act altruistically will decline (see for example Fraselle and Scherer-Haynes 2007). One of our focus group participants for instance argued that we need to work together as a team on saving electricity: Maria: "It is not only about the household, it is the whole thing. You see the shops with Christmas lighting and all that. We are supposed to work as a team. You cannot just tell private people that now you have to save." (8/Group 2, Oslo)²¹

Initiated by themselves and sometimes independently of each other, several respondents suggested a two-level price system as a policy tool that contributes to a fair share of the burdens of energy savings. Kenneth : "But the state could put a tax , for example on [consumption] over a necessary [level] of consumption, for example over 20 000 [kWh]" (2/Group 3, Oslo).²² Hilde put it this way:

I totally agree, when we see these cabin palaces, with all kinds of electric equipment, and then they are talking about people in general and say they should save and the electricity becomes more and more expensive. We have to think about the fact that there are people living on a minimum pension who cannot afford it. If we do not have enough electricity, we have to address those who waste and large business buildings that keep the lights on 24 hours. It is not right. Then we have to do it this way that if you use more than this much, it becomes twice as expensive. That we have that kind of norm which says this is how much it takes to heat a house, this much we have to accept at an ordinary price, and then those who want luxury will have to pay more. (2/Group 5, Kirkenes)²³

The pricing system is here viewed as having a central role to play in allocating scarce energy resources and burdens of saving in a fair manner. It should signal the level of consumption that is considered necessary for all to have. Consumption below this level should be priced reasonably low, while consumption above that level should be priced much higher. Hence, the pricing system is not only viewed as a mechanism that contribute to an efficient allocation of

²¹ "Det er jo ikke bare til husholdningen, det er hele greia. Du ser butikkene med julelys og alt dette her, vi skal jobbe sammen som et team. Du kan ikke bare si til privatfolk at nå må du spare.»

²² «Men staten kan legge på avgift for eksempel for over et nødvendig forbruk av strøm, for eksempel over tjue tusen.»

²³ «Jeg er helt enig, når vi ser disse hyttepalassene, med alt mulig elektrisk, og så snakker de om at folk flest skal spare og strømmen skal bli dyrere og dyrere. Vi må tenke på at det finnes faktisk minstepensjonister i Norge som ikke har råd til det. Hvis vi ikke har strøm nok, så må vi gå på dem som sløser og store forretningsbygg med lyset på døgnet rundt. Det blir feil. Da må vi gjøre sånn at bruker du over så, så mye, så blir det dobbelt så dyrt. At vi har en sånn norm på at så mye koster det å varme opp et hus, så mye strøm må vi akseptere for ordinær pris, og så får de som skal ha luksus betale mer.»

scarce resources, but a system that signal the norm for consumption and indirectly also the norm for contributions to a community resource.

7 Energy Policy: the importance of coherence in logics

Our findings demonstrate that Norwegians employ different logics when it comes to energy consumption and policies for energy savings in Norway. In particular, we have shown that the logic underpinning the energy market in Norway, the consumerist logic, differs from views expressed by many of our respondents which are based on a citizen logic. When there is a lack of coherence between the logics existing on different levels (see Section 3 for discussion on levels), a conflict may arise which both affect people's willingness to voluntarily engage in energy saving activities and their acceptance of current energy policies.

Inga, one of our focus group participants says the following:

I become a bit irritated when we see these people who construct cabins of more than five hundred square meters, keeping the heat on everywhere. Am I supposed to save while they... I think it is nearly despicable. If everybody is supposed to save, then everybody has to contribute. If we are all supposed to save, everyone has to take part. (5/Group 5, Oslo).²⁴

Based on a logic that electricity is a common property, views on how the resource should be distributed in a fair manner²⁵ and which conditions²⁶ that need to be met to trigger individual energy savings easily follows. Met with a consumerist logic from society this might trigger an unwillingness to save electricity for reasons of sustainability. When policies are such that people that use a lot of electricity still is allowed to do that, there is of course a problem of motivating savings when a person use much less energy and that person's view is that "everybody has to take part".

²⁴ „Jeg blir litt irritert når vi ser disse som bygger seg hytter på over fem hundre kvadrat, og så har de varme på over alt. Skal jeg spare mens de, altså sånn tenker jeg. Jeg synes det nesten er forkastelig. Hvis alle skal være med å spare, da må alle være med.”

²⁵ The views expressed by Inga find roots in egalitarian thinking. Egalitarian principles in ethics assert that the best social policy is one where the welfare of the society is maximized subject to the constraint that all individual members should enjoy equal benefits from the society (see e.g. Myerson 1981). Egalitarian principles could be interpreted as giving each individual an equal right to the use of a resource for instance by arguing that each individual should have an equal per capita right to pollute (alternatively equal per capita right to the access of the atmosphere) (See for instance Baer et al 2000).

²⁶ Nyborg (2000) terms this a «homo politicus» with shared responsibility as opposed to a homo politicus with sole responsibility. Both types of homo politicus is in line with what we have termed a citizen logic.

Lack of coherence of logics between the societal level and the individual level, might also lead to a lack of acceptance of energy policies. Historically, hydro power was developed in Norway by building dams and regulating rivers, which might be argued as belonging to the general public of Norway through the regulations in the Outdoor Recreation Act (1957). The Norwegian “Right to Access” (*Allemannsretten*) is regulated through this law and is based on an old consuetudinary law called the “*Allemannsrett*”. This law safeguards the public right to access and passage through the countryside and the right to spend time there. In general, people can pass through, camp and spend time on uncultivated land even if this is private property (there are some specific regulations that limit this, but the overall policy is clear) (see Government 2011). In that regard, considering the rivers and water basins as a common property can be reflected in old norms and also the law on the right to access to the countryside, and this might give rise a low level of acceptance for policies that lead to export of the common property. People in our material massively question the export of electricity:

Jon: I feel that water here in Norway, it belongs to me. When they reduce the level of water in the magazine, I think it is wrong. The fact that the companies exploits the water in the early autumn so as for making money during the winter when it becomes empty and we have to import. I find that system to be wrong. I can see the arguments for such a system, but considered in isolation, I think it is wrong (Interview with Jon, Asker, February 2011).²⁷

This interviewee argues that because electricity is a common resource, it is not right that suppliers focus on making a profit and manage the resource with the consequence that Norway has to import electricity from other countries. This issue has been and is lively debated in Norwegian media especially in periods where electricity prices rise and the water magazines in hydropower dams are reduced (e.g. DN 2012, Facebook 2012).

If his lack of coherence in logics is not addressed when policies are designed, this might hence lead to consumers’ unwillingness to save energy and a lack of acceptance for energy policies as shown above. Reducing this lack of coherence either by designing policies

²⁷ “Jeg føler at vannet her i Norge det er mitt. Når de tapper det ned, synes jeg det er feil. Det at selskapene tapper ned vannet tidlig høst for å tjene penger for så da til vinteren er det tomt og vi må importere. Det systemet synes jeg er feil. Jeg ser argumentene for et slikt system, men isolert sett synes jeg det er feil.”

differently or by making sure that communications is such that it reaches people with different logics, would be an important premise for policies. In the concluding section we discuss some possibilities for reducing this lack of coherence in logics.

8 Implications and concluding remarks:

Our study has shown the following:

- There is not only one logic at play when people use electricity and consider the effects of policies. It is important to understand the quality of these alternative moral frameworks which constitutes alternatives to the logic than the one following from a market perspective. The market logic is mainly the one underlying the Energy Act (1991) and much of the policy formation on electricity in Norway.
- Holding a different logic than the market logic, for instance viewing electricity as a common property, will have other implications for views on the right policies.
- Lack of coherence between a societal logic and an individual logic might lead to unwillingness to engage in energy savings and a lack of acceptance of energy policies. This is important to take into account in policy formation when the aim is to have policies that have effect and are accepted by the population.

Kahan et al. (2010) discuss the importance of communicating in a way that is consistent with the cultural cognition of people. Cultural cognition refers to the tendency of people to form perceptions of risks and facts that are in coherence with their own values (Kahan 2010, see also Douglas and Wildavsky 1983 on the cultural construction of risk). Kahan et al (2011) point to the importance of communicating in a way that is in line with the cultural values shared by the group that the communicators are trying to reach (see also Winther and Ericson 2012). When it comes to motivating electricity savings, basing the argument on a citizen logic could be a fruitful strategy. Communication strategies could be focusing on the moral obligations of savings because of environmental reasons or for sharing a scarce resource in the society. However, as we have shown in our paper, the logics also differ between individuals. Some of the respondents argue in line with a consumerist logic while some argues along a citizen logic. This apparently brings challenges to communicating.

However, by drawing on the model proposed by Westskog et al. (2011), we have emphasized that logics for action are shaped by a multitude of factors on three different levels, including

material factors such as the systems of provision, regulations and so forth. This implies that changes in the tariff structure towards progressive prices, as is currently being proposed in France (Assemblée Nationale, 2012), could potentially also make customers who are presently arguing for a market logic, accepting the purposefulness of a system where ordinary consumption has ‘a limit’. Fraselle and Scherer-Haynes (2007: 191) has pointed out that citizen types of actions, or “individual solidarity consumption”, is only meaningful when this forms part of a collective body to which the individual belongs (see also Crompton and Kasser 2009). Calls for voluntary sustainable actions have little effect when surrounding infrastructure ‘speaks’ a different tongue such as when municipalities construct car parks and at the same time encourage people to use public transport. For the same reason, as shown, appeals for reduced consumption within the liberal Norwegian electricity market are likely to be met with skepticism rather than concrete efforts for reducing consumption. The benefit of electricity pricing systems is that they apply generally, thus they make transparent what the costs (and limits) would be to all. Although the introduction of progressive tariffs would probably raise challenges and even conflict in an initial phase, we believe the findings presented shows that such a policy could find resonance both among ordinary consumers and among citizens.

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