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# **From energy policies to energy-related practices in France: The figure of the “consumer citizen” as a normative compromise**

Mathieu Brugidou, Isabelle Garabuau-Moussaoui

## **[Title 1] Introduction**

The issue of public policies relating to changes in sustainable consumption has recently been raised in France and was a point of focus during the “Grenelle de l’Environnement”, a consultancy and decision-making system bringing together, for the first time, environmental NGOs, companies, trade unions, members of parliament and government officials<sup>1</sup>. However, since the 1970s, France has been faced with the issue of behavioural changes in energy consumption. This chapter proposes to examine the question of the behavioural changes driven by energy-saving policies in France.

In particular, the recent history of energy-saving policies has led to the emergence of the “consumer citizen” in relation to market-framed policy devices. Yet analysis of certain public policies (using energy-saving light bulbs for lighting, thermal renovation via the sustainable development tax credit) shows that whilst frameworks for consumption behaviour can be quite effective when it comes to designing policy, there are shifts and “spill-over effects” in the interlinking and confrontation between the figure of the “consumer citizen” and the actual practices of households and of all the actors involved. Finally, energy practices in French households demonstrate a multitude of social logics either favouring or restricting energy-saving practices, both within “concerned” social groups and amongst the “general public”, where the environmental argument is far from being a pertinent indicator of “energy care”. A better understanding of the social mechanisms at work in energy practices and norms would provide new fulcra for public policies, which are too often based on a conception of homo economicus/ecologicus, designed to maximise his financial and environmental utility, with no consideration for the contradictory imperative embedded therein.

## **[Title 1] History of French energy-saving policies: the evolution of the end user**

Introduced during the first oil crisis in the 1970s, energy-saving policies are nothing new in France. They have been subject to the ebb and flow of numerous development cycles. There have been four main periods, each highlighting different types of end-user: depending on the period, end users would appear to be more or less central to energy policy tools and they are endowed with different characteristics (service user, product user, consumer, and citizen). In the first part of our article we wish to show how public energy policies have approached the issue of end users and their changing behaviour.

## **[Title 2] First oil crisis 1974-1979: two public policies?**

The first oil crisis led to two types of public action, one directed towards demand (reducing the amount of energy used by businesses and households), and the other towards supply (the launch of an ambitious nuclear-based electricity production programme). These two policies were to some extent linked, with energy savings providing an interim solution until the nuclear power plant construction programme reached maturity. But they might also appear to offer contradictory visions (thrift versus production) for opponents of nuclear power. The first oil crisis was an opportunity to implement various informative, incentive and regulatory measures. The Agence pour les Economies d’Energie<sup>2</sup> (AEE), created to implement the energy-saving policy, thus launched the first campaigns targeting the general

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<sup>1</sup> For a presentation in English: <http://www.legrenelle-environnement.fr/-Version-anglaise-.html?rubrique33> [last accessed the 7<sup>th</sup> of July, 2012]

<sup>2</sup> French energy-saving agency

public and portrayed the figure of the “responsible service user”<sup>3</sup>. As the Agency’s director Jean Syrota declared, the purpose of these campaigns was to tone down the notion of constraint which was so present: *“On the contrary, we wanted to reassure. (...) The basic idea was that we had to treat the French people as being intelligent, reliable and responsible”* (quoted by Pautard, 2009, pp. 34-35). The campaigns also introduced the first “energy labels” designed to inform consumers about the energy consumption of certain electrical appliances<sup>4</sup>. Finally, regulations defined modalities for sharing electricity in case of shortage and the first thermal norms for collective housing. The creation of summer and winter hours was an opportunity to combine regulatory measures with information campaigns<sup>5</sup>. At that time, the rhetoric on responsibility was already camouflaging upstream control over behaviour (see part 2).

## **[Title 2] Second oil crisis (1979-1983): contradictory or interlinked policies?**

The second oil crisis (1979-1983) was an opportunity to accentuate certain aspects of these policies. The call for responsible citizenship was highly dramatised: *“If consumers do not demonstrate an exceptional spirit of responsibility, the world could well be heading for disaster”*<sup>6</sup> declared French Prime Minister Raymond Barre. Yet these dramatics also related to the nuclear power programme, which offered the opportunity to script the citizenship aspect of end users. With regard to the development of the French nuclear power programme, the then French President Valéry Giscard d’Estaing said: *“It’s a little bit as if the French people had with their own hands built an oil field capable of producing, on an annual basis, more than half of what our British neighbours pump out of the North Sea, but an oil field which will never run dry”*<sup>7</sup>. The level of investment aid for thermal improvement projects was increased fourfold, and the AEE’s resources were substantially increased, allowing the agency to gain a foothold throughout France. The political changeover which brought the socialists into power in 1981 had no effect on these policies: the nuclear plant construction programme continued, despite F. Mitterrand’s initial undertakings (Blanchard, 2009). National electricity supplier EDF developed a programme promoting electric heating. This programme can be seen as a way of combining the DSM (demand-side management) policy with the nuclear production policy, with a view to replacing fossil fuels, but it came under criticism, with people feeling that a policy for an abundant and relatively cheap offering contradicted consumption reduction objectives (Hecht, 2004).

In 1982 the AFME (French agency for energy management) replaced the AEE<sup>8</sup>, leading to two significant changes. This was the chance to focus on an energy “control” programme oriented towards technical research on energy efficiency and performance, such a technico-economic perspective bringing product users into the limelight (the ergonomics of systems, the average perceived comfort temperature, etc.). Furthermore, it increased decentralisation by delegating part of the job of informing and raising awareness to local levels. French Prime Minister Pierre Mauroy stressed the need for dialogue and consultation at local level, integrating associative dynamics. It was a case of *“allowing*

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<sup>3</sup> From 1946 to 2004, EDF was a public service utility and had the monopoly of the production and commercialisation of electricity. So households were “public service users”. Progressively, new optional tariffs were initiated by EDF, transforming users into consumers. Since 2004, market liberalisation and EDF’s statutory change from public to private status have achieved this shift.

<sup>4</sup> Following a voluntary agreement with manufacturers, twenty years before the European initiative (Pautard, 2009)

<sup>5</sup> Journalists were shown how the one-hour time shift would be implemented throughout the country.

<sup>6</sup> Extract from a speech by Prime Minister Raymond Barre following the second oil crisis; quoted by Leray and De La Roncière, 2003, p. 26.

<sup>7</sup> Quoted by Pautard, 2009, p. 47

<sup>8</sup> In 1982, the AFME (Agence Française pour la Maîtrise de l’Energie) replaced the AEE. It had a budget of 700 million francs and 250 employees. In 1983, during F. Mitterrand’s first presidency, its budget stood at 1.3 billion francs. It employed 500 staff spread throughout France.

*new citizenship to also be exerted in the field of energy, with information being provided to one and all and a true sharing of responsibilities between local authorities, regions and the State*<sup>9</sup>. In fact, the socialist party was divided on this issue, between production-oriented and anti-production sentiments. Governmental arbitrations and discourses reflected these tensions.

### ***[Title 2] The counter oil crisis (1984-1996): energy savings overshadowed***

In the middle of the 1980s, the sharp drop in oil prices and the increasing number of nuclear power plants connected to the network<sup>10</sup> were to lead to a major change in public energy policies, in particular within a political context swinging to the right. This in turn led to a dwindling of the figure of the citizen, in favour of the threefold figure of “efficient equipment”, the product user and the consumer (in the sense of managing a budget and choosing goods in a market). The AFME, which was allocated reduced resources, significantly changed its strategy: it was henceforth a question of backing R&D for effective equipment with which to build an efficient market. Agreements had to be made with household appliance manufacturers, in order to help consumers who were somewhat in the dark to calculate their energy costs. In 1992 the AFME became the ADEME<sup>11</sup> (French agency for the environment and energy management) which in addition to dealing with air pollution and waste, was tasked with concentrating on renewable energies and cogeneration. “Behaviours” were interpreted through the historical energy provider’s pricing policies (demand adjusted to suit offering to a large extent structured by the characteristics of the nuclear power stations). The different plans for boosting the economy through household consumption, within the context of an abundant offering, left little room for energy-saving policies. These changes went hand in hand with a significant increase in end-user energy consumption<sup>12</sup>.

### ***[Title 2] The current emergence of environmental issues, the internationalisation of public action and deregulation***

The final period saw the emergence of new environmental issues (climate change in particular), the internationalisation of public energy policies (due in particular to Europe) and the deregulation of the energy sector. France’s commitment to not increase the level of its CO<sub>2</sub> emissions under the Kyoto protocol in fact contributed towards a redefinition of energy management policies. A new thermal regulation (RT2000) was voted. A communication plan linking energy and the environment was implemented in parallel to the creation of a wider “Points Info Energie”<sup>13</sup> network aimed at the general public. Energy policies began to be decentralised<sup>14</sup>. In 2004, the Energy Orientation Law<sup>15</sup> (LOE) was passed, setting out new energy policy priorities: to combine continued energy security, protection of the environment and the maintenance of “competitive” prices which, in particular, would give all citizens access to energy. Energy management, the development of renewable energies, the construction of a new-generation pressurized water nuclear reactor (EPR) and backing for research were all among the government’s priorities.

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<sup>9</sup> Quoted by Pautard, 2009, p. 53

<sup>10</sup> The nuclear production capacities set up in 1986 became greater than the capacities currently being built or in project form.

<sup>11</sup> Agence de l’Environnement et de la Maîtrise de l’énergie

<sup>12</sup> Total final energy consumption only increased by 0.4% between 1973 and 1980, but saw a sharp 6% rise in the 1980s, followed by a 12% increase in the 1990s (Meuric, 2006, Ministry of Economy). Improved energy efficiency per appliance did not therefore curb the propensity to buy more appliances.

<sup>13</sup> Energy information points

<sup>14</sup> Decree relating to the “Schéma de Services Collectifs de l’Energie” (community energy services scheme) enacted in April 2002

<sup>15</sup> Loi d’Orientation sur l’Energie

The deregulation of the sector as from the 2000s<sup>16</sup>, driven by European policies, changed the modalities of public action. The diversity of the targeted publics and objectives led to an increase in the number of instruments and to the creation of market instruments covering matters such as CO<sub>2</sub> emission quotas or energy-saving certificates (Pautard, 2009). With regard to the energy market opening up to the general public (July 2007), the CRE<sup>17</sup> (French energy regulation commission) was tasked with ensuring that the French electricity and gas market functioned correctly and with establishing the figure of the consumer in this sector. This insistence on the self-regulation of the marketplace went hand in hand with a reduction in ADEME's allocated budget.

Finally, as from 2007, the "Grenelle de l'Environnement" was determined to develop a decisive turning point in public policies relating to the environment. Although the system received mitigated approval – particularly if we consider the lengthy processes of public policy (Boy, Brugidou, Halpern, Lascoumes (ed.), 2012), it demonstrated the return to the agenda of energy policies and of the issue of energy saving in a brand new form. Indeed, the Grenelle set out a strong link between environmental issues (especially climatic) and the market. It deployed information and incentive devices within both the public arena and the marketplace and paid considerable attention to the figure of the "consumer citizen", on the one hand debating energy choices from the standpoint of ecological democracy, and on the other hand opting for "sustainable consumption" in line with economic and environmental considerations. Such consultation was however only possible at the price of preliminary negotiations which excluded the nuclear issue.

### ***[Title 2] Energy policies as part of a global transformation of public action***

This brief summary of public policies in the field of energy saving highlights a succession of configurations of public action which differed considerably, due to outside constraints (oil crisis, awareness of the depletion of fossil fuels, climate change, etc.), the mounting influence of international (European Union, Kyoto agreements) and local bodies and decisions, and political logics. However, some of the changes affecting governance of the energy sector were similar to those affecting all of public action in France: government intervention was increasingly framed between the local level – the result of decentralisation – and the European level (Borraz, Guiraudon (ed), 2008). This context led to the emergence of independent administrative authorities and to a more vigorous associative democracy (Christiansen, Kirchner (ed.), 2000)<sup>1819</sup>. For example, the Commission Nationale du Débat Public (CNDP)<sup>2021</sup>, created in 1995 and reformed first in 2002 and later in 2010, "is part of a more global movement to strengthen information instruments and participation in the policy of public risk management, these instruments having a dual vocation, that of the democratisation of decision-making and that of the orientation of citizen behaviour" (Lascoumes, 2008, pp. 49-50). The increasing recourse to these instruments was also a response to the objective of informing populations, making them aware and responsible, in order to encourage them to change their behaviour: "Policies over the last decade relating to the recycling of household waste and those now targeting saving water and energy, are to a very large extent based on accountability through information" (Lascoumes, 2008, p. 50).

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<sup>16</sup> French law n°2000-108 dated 10 February 2000 relating to the modernisation and development of the public electricity service, French law n°2003-8 dated 3 January 2003 relating to gas and electricity markets and to the public energy service, French law n°2010-1488 dated 7 December 2010 on the reorganisation of the electricity market (NOME)

<sup>17</sup> Commission de Régulation de l'Energie

<sup>18</sup> For a discussion on this concept, see Saurugger Sabine, 2003.

<sup>19</sup> See Grossman, Saurugger, 2006, p. 302 and Jobert, 2001.

<sup>20</sup> French national commission for public debate

<sup>21</sup> <http://www.debatpublic.fr/> [last accessed the 7<sup>th</sup> of July, 2012]

At the same time, these public policies were increasingly characterised by market instruments at the service of greater individualisation, of “focusing on individual behaviour” (Borraz, Guiraudon (ed), 2010, p. 15). We saw that these combinations of instruments defined different but partially connected figures of end-users: during the first oil crisis, the figure under the spotlight combined the citizen with the energy service user. In the 1980s, the product user then came into the picture, in a context of the public monopoly of energy supply, of the deployment of “efficient” technical devices and of a decrease in concerns about energy. Progressively equipped with different types of commodity, the consumer gradually broke free, liberated from these civic concerns (i.e. energy savings) by the virtues of energy efficiency – which transformed the issue of frugality into one of cost. Finally, a “consumer citizen” appeared, linking environmental and market stakes within a framework of sustainable development. Furthermore, citizens continued to express themselves at local (in relation to infrastructures for example) or national (for example, via the Grenelle de l’Environnement) levels.

### **[Title 1] Examples of public policy instruments relating to energy saving: the management and appropriation of devices**

The government and the market thus developed tools, instruments, products and infrastructures, which we might generically refer to as “devices”, to provide a framework for energy-consuming behaviour and to construct the figure of the “consumer citizen”. The second part of this article examines two public policy devices, in order to show how the behaviour-framing process works in practice, and to demonstrate how these devices are “translated” (Akrich, Callon, Latour, 2006) by the different actors (State, market, civil society, households) involved in their implementation. The devices are thus jointly constructed, reinterpreted, or even “spilled over”, depending on each individual actor’s strategies and constraints, and on their relations with one another. The two devices we present were chosen in accordance with various criteria: the diversity of the type of instrument (information + market, then constraint, versus tax incentive + market), the diversity of the type of behaviour (gesture versus investment) and the availability of relevant studies.

### **[Title 2] Lighting and energy-saving light bulbs**

Lighting is an item of consumption appropriated by both public policies and households in order to achieve “energy savings”. By cross-referencing the history of public policies on lighting and their distribution among the general public, with that of actors in the lighting market and that of social practices and their transmission, we can see where the frameworks and translations proposed and performed by the various actors are situated.

### **[Title 3] “Visible” consumption and savings**

First and foremost, one might wonder why lighting has become a symbol for energy saving, when this item’s share of a household’s overall consumption is relatively small (less than 2% of domestic energy costs (Besson/INSEE, 2008)).

Furthermore, the implementation of a public policy regarding lighting and appliances practices is particularly complex, as with each household having an average of 25 light bulbs, it involves millions of light bulb changes and little gestures.

However, households consider that lighting is one of the only “visible” sources of energy saving, having the impression that they can see the electricity being used in the lighting, just as they can see water coming out of taps (Moussaoui, Vaubourg, 2004); in addition, the energy-saving awareness campaigns of the 1970s, related to lighting, were “embodied” by children and adults at that time and then passed on to later generations (Garabuau-Moussaoui, Bartiaux, Filliastre, 2009). Lighting also has very “strong” social functions (comfort, ambiance, safety, territory, riches, etc.) which are on the face of it incompatible with the notion of savings. The contradictory imperative is “resolved” in the action of “switching off when you leave the room”, something which avoids one having to question

either the electricity consumption when members of the family are in the room, or the power or number of light bulbs (Moussaoui, 2007).

### [Title 3] Improved unitary energy efficiency, but slow diffusion and no slow-down in the acquisition of multiple appliances

Evolution in the way people light the living rooms is tending to shift from a central light source (on the ceiling or in the form of a halogen lamp) to multiple points of light (or even string lights). So “in the space of twenty-five years, the French people have trebled their consumption by increasing the number of light sources (330 million light bulbs are sold every year).”<sup>22</sup>

At the same time, “energy-saving” light bulbs<sup>23</sup> (ESL) are seeing very limited success. In 2006, the market share of compact fluorescent lights (CFL) was modest (6% of sales): “In 1998, 25% of households said they owned one; 35% in 1999 and 44% in 2001” (Zélem, 2010, p. 39) with 68% in 2008. Given that each household has an average of almost 25 light sources, having an ESL remains a highly “symbolic” act and it wasn’t until 2005 that a quantitative survey asked households if they equipped “a large share of their lights with energy-saving bulbs”. Only 15% gave a positive response (Roy, 2006). During the same period, there were an increasing number of operations to distribute low-energy light bulbs or to sell them at reduced prices.

Studies on the use of these light bulbs (Moussaoui, Vaubourg, 2004) show that they are used in places of little social consequence: toilets, corridors, cellars, garages, etc. ESLs are in fact considered to be expensive and to give off light which is not very pleasant (“cold colour”, “pale”), taking time to light up and being unaesthetic (their shape does not suit the light sources purchased). They are therefore “stigmatising”. These disadvantages become advantages in children’s bedrooms: on bedside tables there is no longer any worry that children will burn themselves; they also serve as night lights for children who are afraid of the dark. In the middle of the 2000s, although the general public were more aware of them, energy-saving light bulbs were still not used to any great extent in people’s homes, despite promotional campaigns and incentives to buy them based on two arguments – cost and ecology: “A light bulb which reduces your bill and preserves the planet? Yes, it’s possible”<sup>24</sup> (ADEME campaign, 2008).

### [Title 3] From encouragement to regulatory constraint: building a process to bring market actors on board

It is within such a context that several European directives are attempting to reduce energy consumption for lighting (Catteau *et alii*, 2010)<sup>25</sup>. The laws initiated by The Grenelle de l’Environnement confirmed these different regulations and have made it possible to bring forward to the end of 2012 the deadlines planned in European calendars for replacing incandescent light bulbs with “efficient” bulbs, by signing a voluntary agreement between public authorities and actors in the energy sector.

The obligation to replace incandescent light bulbs with ESLs has conducted the State to structure the market, but also and above all to propose some incentive devices for the actors involved, so that they would play the game and plan ahead to meet European obligations.

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<sup>22</sup> Source: <http://www.arehn.asso.fr/dossiers/ampoules/ampoules.html> [last accessed the 7<sup>th</sup> of July, 2012]

<sup>23</sup> Energy-saving light bulb (ESL) also covers compact fluorescent light bulbs (CFL) and LEDs.

<sup>24</sup> In French, “Choisir une ampoule qui réduit sa facture et préserve sa planète, aujourd’hui, on peut.”

<sup>25</sup> Directive n°2005/32/CE, complemented by regulation n°244/2009, aims to “integrate energy saving when appliances are designed.” In addition, an earlier directive was introduced to oblige “manufacturers and importers to fund the collection and processing of used appliances” (Directive 2002/96/CE, brought into French law by decree n°2005-829 dated 20/07/2005). A calendar for replacement is set out in European regulation 244/2009.

Certain companies had taken the initiative regarding this regulatory evolution and had already turned constraint into opportunity. Very early on, light bulb manufacturer Philips had oriented its research and investment strategy towards so-called “eco-responsible” solutions: it used lobbying to put these issues onto the European political agenda and participated in discussions at the Grenelle de l’Environnement. Its innovation strategy was a way of getting ahead of its Chinese competitors, who would not have the resources to develop the new technologies that Philips was offering. Furthermore, Philips and other manufacturers are currently orienting their research towards LEDs, with CFLs being considered as a transition technology (Cateau et alii, 2010). Here, new regulations can thus be seen to support industrial strategy.

Manufacturers and retailers found that these “incentive” devices could be integrated into their commercial strategies and competitive positioning. They “translated” the incentive devices into devices aimed at the general public (compatible with the figure of the citizen-consumer: the fight against climate change, financial savings, long life, child safety, etc.) and modified their products and packaging to suit these advertising messages (Pautard, 2009).

It is striking to note that “civil society” has taken the same direction, with the majority of consumer and environmental associations helping the distribution of ESLs rather than hindering it, despite the controversies which have received little attention (mercury, electromagnetic fields).

Awareness campaigns had a role to play in achieving acceptance of the constraint. Unlike other countries<sup>26</sup>, the French people would appear to have “accepted” this obligation to replace bulbs. Is this because they have not yet changed them all? Or is it because public policies and the marketplace have helped create a “norm” which is in the process of being integrated? Campaigns have now switched focus onto the recycling of light bulbs, backed by the creation of the Recyclum organisation, and the issue now is the shift from purchase to recycling (use being left unspoken). A new paradox has appeared: whilst the various actors have come to a consensus to hide the mercury controversy, recyclers would gain from using this argument to “mobilise” consumer-citizens.

### [Title 3] Conclusion

This example shows that the construction of a choice for consumers, first between incandescent light bulbs and energy-saving light bulbs, then – nowadays – between several energy-efficient technologies, is managed by the authorities, in partnership with manufacturers, retailers and civil society. The obligation to replace has not therefore led to market actors having less influence, or to the end of information campaigns and the enrolment of actors. Public authorities have looked both to provide incentives for market actors and to equip consumers (energy labels, promotional campaigns and incentives to buy, followed by collection systems for recycling). The State here plays the role of incentive provider (in particular by bringing the calendar forward) and regulator, but also has the role of constraining (regulations). In this example as in others (Calwell, 2010) the question is whether or not the strategy of energy efficiency per product (which would seem to be one of the avenues of consensus between State and the market), when it is not coupled with a strategy of energy moderation and frugality (no public policy on the use of appliances) can meet the environmental objectives upon which the directives and regulations are founded.

### ***[Title 2] The thermal renovation of buildings: the Sustainable Development Tax Credit example***

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<sup>26</sup> To see the controversies in the USA, triggered by the Tea Party and taken up by the Republican party (<http://www.goodplanet.info/Contenu/News/USA-les-republicains-declarent-la-guerre-aux-ampoules-a-basse-consommation>) or the incandescent bulb stockpiling phenomena in Great Britain, Germany, Austria, Hungary, Poland, (Cateau et alii, 2010).



Designed to improve energy efficiency in buildings, the Sustainable Development Tax Credit<sup>27</sup> (SDTC) introduced in 2005 has been a great success. This tax incentive was designed to reach all households, with those who pay tax seeing their tax bill reduced, and those who do not pay tax receiving a cheque<sup>28</sup>. Over the first four years it led to 5.4 million renovations for a total of 23.6 billion euros, and concerned one out of seven main residences. However, analyses by Vauglin et al. (2011) have shown that this success encountered certain limits: firstly, it would seem that the government found it hard to predict how much this measure would cost<sup>29</sup>: its annual cost increased significantly, from 1 billion euros in 2005 to 2.5 billion in 2008, which led the government to propose a far less attractive measure, that of the interest-free eco-loan<sup>30</sup>. Furthermore, only some categories of the targeted population seem to have been interested, carrying out types of work for which the energy efficiency objective was secondary. Generally speaking it was in fact well-off households, homeowners and residents in detached houses who benefited from a measure which they saw as a tax opportunity (*“deadweight effect”*, said the experts interviewed by Vauglin). Vauglin et al. have highlighted appropriation strategies employed by different types of actors which partly explain these “failures”. Households had the work done not so much for “environmental” reasons – improving the building’s energy efficiency – but rather for reasons of comfort, economic value, or to renew their installations. They thus preferred to change windows or the boiler, when “[technico-economic] rationality would suggest starting with loft or wall insulation” (Vauglin et al., 2011, p. 18). Yet this selective appropriation by households would not have had such an effect if it had not combined with the economic logic of certain business sectors: the industrial windows sector, for example, 80% of whose market was concerned by the SDTC, actively strove to “harness” this measure. Finally, the government would appear to have been using the measure to pursue several objectives, some of which were divergent: in addition to the environmental aim, it wanted to shore up the economy (by supporting business sectors<sup>31</sup>) and reduce costs. Furthermore, the government’s difficulty not only in predicting distribution of the measure but also in refocusing its design in accordance with the modalities of its appropriation by both households and business sectors – which supposed careful monitoring of the measure – undoubtedly explains some of the SDTC’s limits.

Like all innovations, policy instruments directed at the marketplace configure forms of consumption which are themselves reformulated by professional actors and end-users. We know that an innovation’s success depends in part on its capacity to integrate these appropriation logics. Yet in this case the State would appear to have had certain difficulties in “renegotiating” the “use script” (Akrich, 1992) embedded in the instrument when taking into consideration the reformulations of the different actors.

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In conclusion, these two examples show that consumer behaviour is shaped by public policy instruments, but that there are spill-overs, strongly supported by market frameworks, linked to the diverse motivations of consumers who reappropriate these measures, “translate” them and find a meaning for them within their practices (comfort, renewal of household equipment, and also the environment) in accordance with numerous social logics.

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<sup>27</sup> Crédit d’Impôt Développement Durable

<sup>28</sup> After the work has been carried out

<sup>29</sup> The SDTC has cost the government 7.8 billion euros.

<sup>30</sup> That is an interest-free loan with no application fees, available from all leading banks in return for tax relief from the government. Available since 1<sup>st</sup> April 2009, it can no longer be combined with an SDTC. This measure had very mitigated results, partly because it allows one to make monthly repayments on loans for works costing lesser amounts and is therefore, compared to an SDTC, less tangible than a tax rebate, both for professional sectors and for consumers (Vauglin et al., 2011).

<sup>31</sup> For a large part, renovation works in fact relate to non-relocatable jobs.

## **[Title 1] From change in behaviour to an understanding of the dynamics of practices and social norms**

If we look at this from the standpoint of households, the figure of the “consumer citizen” which is currently being drawn in energy policies remains a fragile construction. Indeed, public discourses maintain an ambiguity by voluntarily deploring the lack of environmental commitment from “consumer-citizens”. Even when they have been “made aware”, households do not appear to take concrete action. But as we have seen (part 2), this observation is largely due to highly simplified (or even minimal) representations of use as they are encoded within the State’s instruments: the civic failures which are so deplored very often camouflage the inability of these instruments to transform and reduce the diversity of uses. But, in our opinion, a household’s commitment to energy efficiency or frugality devices depends more on a capacity to appropriate than on environmental values. In particular, the notion of *energy care* is currently being developed at the intersection of social practices and norms, of public policies, of debates and controversies, of commercial offerings and socio-technical devices. This does not necessarily mean that households are saving more energy than in the past, but that we are seeing the constitution of an energy-care practice (including a repertoire of shared actions, skills and meanings (Warde, 2005)) and the emergence of a new social norm (bringing together a set of devices, practices and justifications for practices) in mainstream households.

This reconfiguration of practices and social norms is linked to an evolution in the discourse on the connection between energy and the environment (first part), to political and commercial instruments and devices (second part) and also to a dynamic of possible consumption customs and politicisation on the part of end users, which we analyse using Hirschman’s trio (1970), helping to connect public and private concerns, political and market dimensions, and their social dynamics:

- The energy-care norm might be the object of multiple reappropriations; it will then be a case of paying attention to the description of the diversity of the practices structured by the norm (*loyalty*),
- It might also be confronted with practices firmly structured by other norms – such as comfort – and fail to reconfigure them in accordance with the new normative regime (*exit*),
- Finally, it might give rise to a politicisation which, for example, condemns its modalities of application or its founding values (*voice*).

## **[Title 2] Loyalty: the normalization of practices**

The many works of research on households’ energy practices<sup>32</sup> have shown that energy care has been caught up in and overtaken by a consumption system, which explains the high levels of consumption. An extremely weak link has therefore been established between environmental attitudes and pro-environment actions, in particular through analysis of the relationship between energy consumption and income (Dobré, 2002, Wallenborn and Dozzi, 2007). Similarly, the notion of “compartmentalisation” (Halkier, 2001) of areas of consumption (food, leisure, mobility, clothing, etc.) helps us to understand that these areas of life do not involve the same socio-technical devices, life priorities, symbolic meanings, etc., leading to heterogeneous practices and norms. This phenomenon is found in items of energy consumption - lighting, heating, cooking and cleanliness refer to different practices, social representations, equipment and public policies.

However, despite this diversity, we were able to identify several recurrent energy-care logics (Garabuau-Moussaoui, 2011). An analysis by generation and by life stages allowed us to reveal historical “trends” for the development or, on the contrary, for the minimisation of these logics, very similar to those seen in this chapter:

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<sup>32</sup> For a summary of works on this issue in the fields of psychology and sociology, see for example Moussaoui, 2008.

- a logic of anti-waste among the most elderly (who lived through the war, the rationing, or the ensuing shortages) passed down from one generation to the next, which still remains a benchmark, even for children today;
- a financial logic, which is very strong in every generation because it is the simplest way to translate energy conservation efforts (smaller bills are a visible sign of decreasing consumption) and because budget management (“domestic economy”) is a vital part of domestic activity for all generations.
- a rising environmental logic, which is hard to accept if it clashes with financial logic (e.g. with reluctance to pay for energy-efficiency services, for energy management/conservation advice or for organic products);
- a logic of criticising over-consumption, which is re-emerging today (it first appeared in the 1970s);
- a regulatory logic, some people being sensitive to the fact that certain practices are “required” by technical devices, laws, the government’s awareness campaigns (sorting waste, turning off appliances’ standby mode, etc.).

These configurations of practices and discourse, given structure by the energy-care norm, can be accompanied by normative “police” work and by a stigmatization of deviant behaviour (Becker, 1963), in relation to the figure who “thinks that it is not important to save energy”, backed by terms such as laziness, stupidity, selfishness or greediness, on the basis that such people do not “need” or do not “want” to be careful, because they are only interested in “personal” and individualistic comfort, whereas those who are careful show “concern” towards the planet and towards other people (Brugidou, 2011).

### ***[Title 2] Exit: normative conflicts***

These energy-care logics can be counter-balanced by other logics. In particular, the comfort logic is a very strong social norm which for the most part remains linked with material comfort. This logic has generally gone unquestioned and has increased since the war. For the people interviewed, there are almost never any doubts about accumulating energy-consuming electronic devices and appliances. They consider it to be “normal” that the “modern” standard of living (Shove 2003) includes a “material culture” of energy and appliances which consume a high amount of energy.

Furthermore, many logics are ambivalent, i.e. they can lean towards energy care or towards energy consumption. In this sense, parents can be confronted with contradictory imperatives, that of educating their children to be careful with energy and that of providing them with comfortable living conditions (sometimes by sacrificing their own comfort). Should one turn up the heating in the children’s bedroom, or should one keep the temperature down, for health reasons? Should they be given a bath every day? Should one buy the game console they are asking for?

Similarly, social distinction, for so long based on the accumulation of material goods, is in certain milieus being transformed into “ostentatious sobriety” (Moussaoui, 2007). Hybrid cars, solar panels, heat pumps and wood-burning fires are becoming meaningful identity markers.

These different logics of action come together and evolve over time. The integration of a new element in the everyday world might therefore create chain reactions relating to the dominant logics of action. This is referred to as the Diderot effect (Shove, Warde, 1998) and the rebound effect (Gossart, 2010) when it leads to a rise in consumption, but there can also be “trajectories” oriented towards greater energy moderation. However, compartmentalisation can prevent or minimise this process of distributing new practices.

### ***[Title 2] Voice: politicisation of the norm***

Voice – in the sense of politicising an issue – is the typical mode of action used by the “moral crusader” (Becker, 1963), who wishes to introduce a new norm based on values and on a representation of the common good. This is why the instigation of debates on environment and energy-related issues in numerous arenas (media, social and personal networks, etc.) contributes towards the evolution of collective norms, diffusing the arguments and controversies into mainstream discourses. It would also increasingly appear to be a required route for the construction of public policies. With regard to energy saving in France, in its 2007 “Quick, it’s getting warm”<sup>33</sup> campaign, the ADEME included a public debate device on demand-side management (Benvegna, 2011) and the Grenelle de l’Environnement was presented by its promoters as a process of consultation between the different stakeholders which included a phase of consultation with the general public (Boy et al., 2012). Everything took place as if these devices were playing the role of legitimising (or even ritualising) (Lassègue, 2010) public policies, for the purpose of verifying the “acceptability” of the proposed measures. Consumer-citizens, whilst enjoined to give their opinion, relied on different forms of authority (experts, political representatives, interested groups or publics, etc.) who guaranteed these proposals, thus exonerating them from having to go through the cognitive and affective processes which would allow them to construct a belief. So for the majority of citizens, the appropriation and acceptance of a public policy do not require an ideological commitment or a belief (the prerogative of “moral crusaders”, mobilised groups or concerned publics – Brugidou, 2008), but rather a relative detachment, in a balance between “concern” and confidence/delegation in the devices implemented to deal with the issues. The ineffective policies miss

However, the process of institutionalising a norm and its distribution is not a linear one. The phasing-in of a norm, through implementation of public policy devices, very often gives rise to periods of controversy<sup>34</sup> which can undermine the institution of the norm (what is women’s role in new ecological practices? asks E. Badinter (2010), and what about a degrowth model, rather than a green growth model? say Degrowth militants (Latouche, 2006) and the Economistes Atterrés (2012)). These controversies can also relate to the ways in which a norm is applied. For example, the waste-sorting norm went through a period of strong development which began when a collection (separate bins and collection by the authorities) and recovery system was introduced, demonstrating “the need for an institution which imposes its rules in order for individuals to self-impose new obligations” (Dujin, Pocquet, Maresca, 2007, p. 85). But the analysis of the discourses of French people who answered a quantitative survey on sorting waste (Brugidou, 2011) shows that whilst the principle of sorting is not called into question, the ways in which the norm is put into practice – through criticism of how the collection is organised, i.e. implementation of the socio-technical and regulatory devices – can be the subject of controversy: responsibility for the absence of any sorting is placed on the local authority’s failure to implement the norm. In the same way, the carbon tax gave rise to major controversies in 2010 during the Grenelle de l’Environnement<sup>35</sup>. Such controversies can go hand in hand with a norm’s distribution (to whatever degree) within the social space; from this standpoint, the waste-sorting norm would seem to be more widely implemented in France than is energy saving (Brugidou, Moine, 2010).

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The different studies carried out by ourselves and by other researchers show that energy-care practices do exist, that households are “careful” about energy (albeit with varying conceptions) and that they are prepared to “accept” new devices for energy efficiency, energy moderation and renewable energy production, if they can appropriate them and if they can integrate them into the system of consumption that they construct from one day to the next. This takes place when household

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<sup>33</sup> In French, “Faisons vite, ça chauffe”

<sup>34</sup> These controversies crop up every so often, as can be seen with road safety policies (Hamelin and Spenlehauer, 2008).

<sup>35</sup> <http://www.liberation.fr/taxe-carbone.99830> [last accessed the 7<sup>th</sup> of July, 2012]

practices are faced with a *transformation challenge*, through the appropriation of information or a device within a broader system of consumption and life project.

So households are not torn solely between a “consumer” identity and a “citizen” identity. They are dealing with a whole set of issues and cannot simply “vote with their wallets”. This does not remove the firmly rooted existence of energy-care practices, which take place in the name of various different (but not infinite) logics, demonstrating the social reinterpretations of public policies.

Integrated practices and the institutionalisation of norms demonstrate both the constitution of “energy care” and the maintaining of “comfort”, even when criticised. Yet far from opposing, on the one hand, public policies which are virtuous in their attempts to achieve the advent of an energy transition, with, on the other hand, households who are bad citizens (Rocheftort, 2007) resisting change, this pairing is embedded within the current “socio-technical regime” of energy (Geels, 2002), both in France and in other European countries (Fudge, 2010). Indeed, we find important occurrences of these two themes in the different spheres of influence and of construction of social practices relating to energy. As far as the political sphere is concerned, we see the emergence and development of public environmental/energy policies and in particular the deployment of end-user awareness and market instruments (the symbolic and economic management of the current political situation) and, at the same time, the development of a discourse on the need for growth in times of crisis (which requires cheap and abundant energy), and thus for consumption (political management of the current economic situation). Similarly, in the market sphere, there is both the strong influence of public policies (market instruments) - along with pressure from consumers to “greenify” and for companies to communicate - and strong consumerist pressure (Rumpala, 2009).

### **[Title 1] Conclusion**

The “consumer citizen” is therefore a “policy” figure (in the sense that he/she is constructed during the implementation of a public policy) who tries to reconcile comfort and the environment in relation to both energy issues and, more generally, consumption issues. The state and the marketplace rigidly structure this figure, both by developing a discourse of responsibility and of the consumer-actor, intended to “individualise” the agent, even in his/her sense of citizenship (making a small gesture to help the planet, voting with his/her wallet), and by implementing devices which effectively orientate actions in the desired direction (smart grids, nudges, etc.).

This figure constitutes a normative compromise, for several reasons. Firstly, the market and regulatory devices which implement it, relate to different norms: to varying extents they favour comfort or the environment, a pairing which is forever under tension. Furthermore, they are conveyed by networks of actors which promote different solutions (technology versus behaviour, efficiency versus sufficiency). Finally, they are the result of an accumulation, or even of sedimentation, of the historical strata of public policies (Hamelin, Spencehauer, 2008). The processes of institutionalising norms are more or less continuous, with periods of intense production, stagnation, or even relative reversals. For example, one might say that France’s energy-saving norm of the 1970s/1980s was partially “uninstalled” (to use a software term), victim of a process of deinstitutionalisation, with the discursive and regulatory devices of energy-saving policies falling somewhat by the wayside (thermal regulations for buildings not being implemented (or not fully), awareness campaigns being further and further apart, etc.).

We must distinguish between the definition of the “problem” of energy saving, which would currently appear to favour the “causal story” (Stone, 1989) of the “citizen consumer”, and the range of solutions which are actually implemented, combining extremely varied instruments (Hamelin, Spencehauer, 2008), because they result from these processes of sedimentation and compromise and from the confrontation between policies and uses (rejection, appropriation, politicisation).

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