

EL-EFF REGION

WP 2: Representative survey

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In order to identify the main lack for dwellings to reach electricity efficiency, the ARENE in the frame of the European EL-EFF project carried out a short survey addressed to Ile-de-France households. The results of the survey crossed with available benchmarks and consumption data will help outline the main issues to tackle and moreover will provide information on who to target and how to approach them by assessing their lack of knowledge and their expectations.

Previous and recent similar surveys were checked to benefit from their results and go further in the analysis. The ARENE finally realised the survey with the BVA institute. The survey comprised 3 questions in 2 omnibus waves that took place in May 2007 and reached 354 inhabitants in the Ile-de-France region.

Previous surveys consulted and used as a starting point are:

-The study from the INSEE (national statistic institute) and the Ministry of Ecology and sustainable development, the IFEN (French environment institute) and the ADEME (national energy agency) called “environmental practices of households”, which is integrated to the “permanent survey on households’ life condition”. The particularity of this study is to be carried out frequently while always asking the same question in order to monitor trends on the long run and people’s opinion evolution. The study used is the latest one available, realised in 2005 and published in 2007.

-The IFOP institute survey for the Ministry of Finance and Industry “French and energy” barometer of the government communication. It concerns energy as a whole and contains a part dedicated to energy efficiency. The study used was realised in October 2006.

-The “annual study on households works” carried out by the ADEME and Sofres institute in 2004. This study assesses households’ investment in some energy efficiency works, especially regarding the buildings’ envelope, as well as the factors influencing their motivation to carry out such work.

1. Knowledge level on energy efficiency level and knowledge on energy labels.

The results of the previous surveys presented before outlined a few interesting figures and trends, including:

- 57% of households know the energy label (2006) vs. 36% in 2003.
- 41% of households pay attention to energy consumption when purchasing appliances (2005).

Before being able to carry out relevant energy efficiency measures it is essential for people to be aware of their level of electricity consumption and their consumption breakdown, at least on a scale. The idea is that if people are unaware of which appliances or items are the most consuming they may not target them or be reluctant to realise an investment they consider as inappropriate whereas it is actually cost effective. To check this knowledge interviewees were asked to classify the different consumption posts from the most consuming to the lesser one.

The nomenclature is the following: cold appliances are fridges and freezers; cooking appliances are ovens and hobs; lightings; entertainment devices are television, DVD players, hi-fi device etc; washing appliances encompass washing machines, tumble dryers and dishwashers.

- Which of these devices do you consider to be the most electricity consuming?

First

Base : 354 All the interviewees 18 years old and + RP	Number	%
Redressed basis	354	100,0
Cold appliances	57	16,1
Cooking appliances	98	27,8
Lightings	25	7,2
Entertainment devices	37	10,5
Washing appliances	122	34,6
No opinion	14	3,9

Second

Base: 340 All the interviewees 18 years old and + RP	Number	%
Redressed basis	340	100,0
Cold appliances	61	18,0
Cooking appliances	88	25,7
Lightings	39	11,6
Entertainment devices	52	15,3
Washing appliances	95	27,9
No opinion	5	1,4

Third

Base: 335 All the interviewees 18 years old and + RP	Number %	
Redressed basis	335	100,0
Cold appliances	70	20,9
Cooking appliances	37	10,9
Lightings	76	22,8
Entertainment devices	89	26,5
Washing appliances	55	16,4
No opinion	9	2,6

If the weight of washing appliances is well appreciated, cold appliances are largely underestimated. This would explain the different penetration rates of A-rated appliances regarding those different devices. Indeed in 2005 almost 80% of washing machines sold were A-rated compared to 70% for fridges and 36% for freezers. Also people seem to be aware of the level of consumption due to entertainment appliances and standby. This is probably due to the large increase of the penetration rate of IT devices in dwellings as well as longer hours of use, which they can experience in their everyday life.

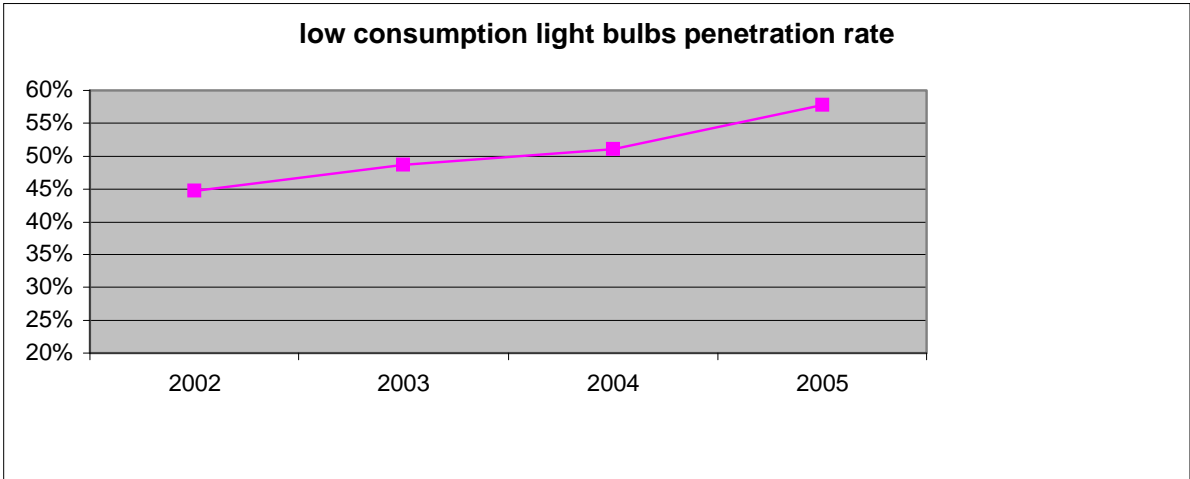
Cross tabulation help knowing which population are aware of their consumption and which one need information. The 18-24 underestimate the washing related consumption as well as cold appliances and over estimate entertainment devices, which is probably due to their personal large use of entertainment devices. People with low income (500 to 749) tend to place lighting as the first post of consumption (33%) whereas in general lightings seems to be underestimated.

With regards to such results it is interesting to compare measures actually realised by households regarding the different post of consumptions and people's belief on the different level of consumption. This tends to be assessed through the consultation of previous surveys and additionally by the second question of this survey.

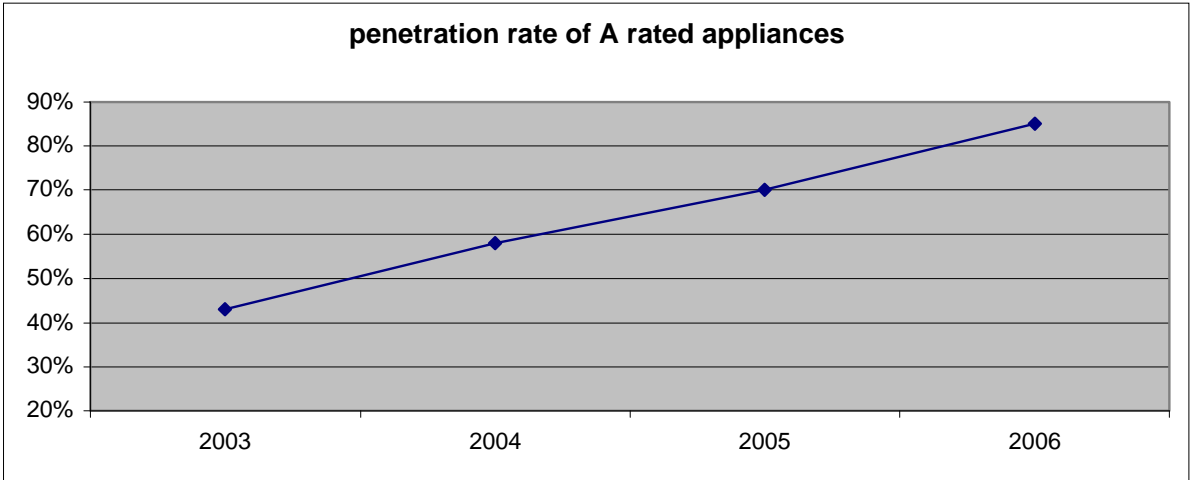
2. Behaviour and purchase mechanisms.

The results of the previous surveys presented before outlined a few interesting figures and trends, including:

- Less than one out of two households does a financial effort to get class A appliances (2005).
- The class A over cost essentially discourage people with low income.



In the last few years a constant increase of low consumption light bulbs use has been observed. It seems that people have understood the potential saving that can be achieved through the use of such energy efficient bulbs. Information campaigns have probably helped saving the reputation of those bulbs, usually disregarded as unaesthetic and providing a bad illuminance quality notably because of its warming up time. Nevertheless this penetration rate remain quite low; it does not mean that the whole house is filled with fluocompact light bulbs nor that they are placed adequately in the house i.e. able to achieve their full potential.

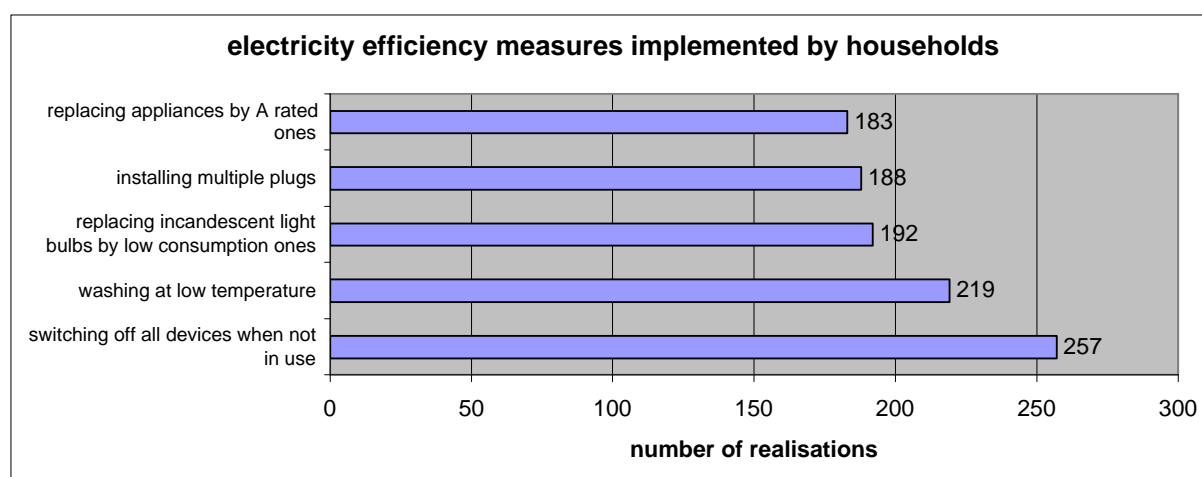


A-rated appliances benefit from a far better assimilation potential compared to fluocompact light bulbs, as the only difference with greedier appliances is their level of consumption and therefore do not modify people's habits, contrary to the light bulbs that present more differences. This would explain the far bigger penetration rate: over 80%. Still all types of appliances do not benefit from the same penetration rate. The most spread are fridges; which is probably due to the fact that they were the first appliances to benefit from the A-rated energy labels and were also the first appliances to be advertised for by energy efficiency information campaigns.

However they are other technological measures that can be undertaken, and also behavioural ones that need to be assess.

- Which of these measures do you personally take in order to reduce your electricity consumption:

Base: 354 All interviewees 18 years old and + RP	Number	%
Redressed basis	354	100,0
Replacing incandescent light bulbs by low consumption ones	192	54,1
Replacing old appliances by A-rated ones	183	51,6
Installation of multiple plugs	188	53,0
Washing at reduced temperature and limit the use of the tumble dryer	219	61,9
Switching all devices not in use even during short period	257	72,6
ST At least one answer	338	100,0
No opinion	16	4,6



Most people seem to realise the free gestures that allow energy savings: switching off devices or washing to lower temperature. However only one person out of two realises financial investment in energy efficiency even though they have great potential, are cost effective, and even cheap for some of them. This is probably due to a lack of information on the fact that people will save money on the appliance lifetime as well as having the cost of the measure reimbursed. It is coherent with the results of the first question: as people tend to underestimate

the weight of cold appliances in the total energy consumption, they tend to underestimate the opportunity of realising energy saving measures on those items. Nevertheless as outlined in other surveys on that topic the level of investment is repulsive to people, especially those with low income who cannot afford spending such amounts at once. It is also obvious for the 18-24. Another group specificity is that the elderly rarely replace their light bulbs. In general they seem to be the one with the lowest rate of behaviour modification. Interestingly enough people with the lowest income, potentially victim of fuel poverty, do little even on free or cheap measures. This is probably due to a lack of awareness and information. This could mean that information canals used so far did not reach them or the content of the message were not appropriate to their needs and characteristics.

3. Interests topics & Main information canals.

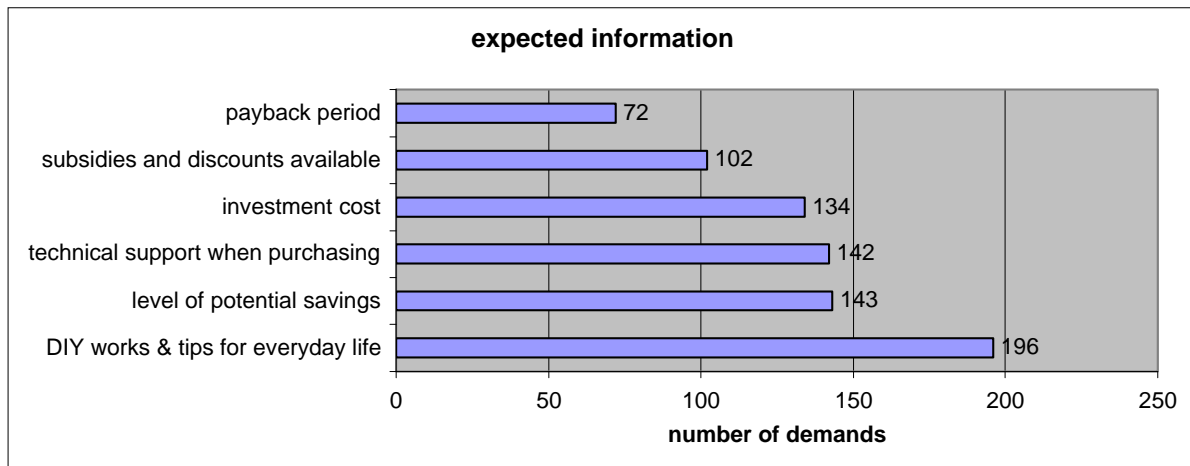
The results of the previous surveys presented before outlined a few interesting figures and trends, including:

- Information provided by the ADEME and Energy advice centre are respectively responsible for 1.4% and 0.7% of incentive means.
- Advices from professionals appear to be the most useful to households for the realisation of energy efficiency works with 81%.
- In the same condition, information provided by the ADEME is indicated by 31% of the households, the practical sheets and useful addresses by 62% and advises from relatives and friends by 60%.
- 13,5% of households knows the energy advice centres.

Regarding this topic and the trend that has previously been observed through former surveys; one of the question chosen for the survey was:

- According to you on which points should information campaign focus? :

Base : 354 All interviewees 18 years old and + RP	Number	%
Redressed basis	354	100,0
Level of potential savings	143	40,4
Investment costs	134	37,9
Payback period	72	20,4
Technical support for choice making	142	40,0
Subsidies and discounts available	102	28,8
DIY works and tips for everyday life	196	55,5
ST at least one citation	324	91,5
(No opinion)	30	8,5



Most people, especially the youngest, want to get tips and DIY jobs advices to realise cheap or free savings. This underline the importance accorded to the financial aspect of energy saving measures. People want to save money without investing or very little, and without regards to potential savings. Indeed the saving potential of measures that could be implemented arrives only second. Finally we can notice that energy efficiency remains quite complicated to approach for people as 40% of households keep on asking for technical support to choose their appliances.

Quite strangely, people hardly ask for subsidies and discounts available. One probable explanation, in regard to previous survey results and other results in this one, is that it is synonymous for them of huge investments they are not ready to make or they cannot afford.

Conclusion.

Even though information campaigns alongside rising prices of energy managed to raise people's awareness on the importance of lowering their energy consumption; people are still confused on how to tackle their consumption. As a consequence the full potential of energy efficiency regarding electricity is not achieved. The results' assessment will help targeting different groups within the household sector and offer them support to tackle their electricity consumption. People will be provided with obvious necessary information and demanded one emerging from the survey's answers.

First of all people do not realise which items or appliances are the most consuming in the house. They know some of the tools at their disposition but are still puzzled about the level of savings they can provide. They often ignore the potential savings related to the different measures whether they are behavioural or technological.

Changing behaviour seems to work best as it is free; still actual realisations are probably overestimated. However, even if the levels of achievement are high they do not reach 100%, which suggest that changing behaviour is not that easy for people and that there is still work to do to reach the necessary sobriety. It also suggests a problem of conception of the impact of their behaviour on their consumption. Individual savings are probably too low for them to consider modifying their behaviour; and they do not have a holistic approach of the impact of their behaviour on a larger scale.

Technological measures that represent a great level of savings are less undertaken even though people obviously know about A-rated appliances and their energy efficiency. The reluctance to invest is the result of the combination of too low income as well as the ignorance of the cost effectiveness of the investment.

Information expected is very different depending on the categories of households. This means that, on the same topic, you cannot address the same way to different categories. People do not have the same level of environmental awareness, of knowledge on technologies, economics, nor of income. Therefore the scope of energy efficiency within the household sector is very wide and tackling electricity efficiency in that sector means a multiple approach in regards to each category's specificities and expectations. For instance tips are demanded by healthy young people with low income who are not afraid to realise DIY jobs and change their habits whereas old people with comfortable income would rather pay the price to get an energy efficient appliance in order to minimise the impact on their daily routine.

The results of this survey will help giving birth to new brochures to help households addressing their electricity consumption issue.