## **PACHELBEL**

POLICY ADDRESSING CLIMATE CHANGE AND LEARNING ABOUT CONSUMER
BEHAVIOUR AND EVERYDAY LIFE

### **PUBLICATION**

Project Number:244024

#### **AUTHORS:**

Poumadère, M., Mays, C., Schneider, N, Prades, A., Espluga, J., Horlick-Jones, T., Barnett, J., Konrad, W., Enander, A Constantin, M

## TITLE Guidance on Stimulus Materials

The research leading to these results has received funding from the European Community's Seventh Framework Programme FP7/2007-2013 under grant agreement n° 244024.

Status	PROJECT DELIVERABLE
Date	2012
Publisher	EUROPEAN COMMISSION, 7 <sup>TH</sup> FRAMEWORK PROGRAMME
Reference	Poumadère, M., Mays, C., Schneider, N, Prades, A., Espluga, J., Horlick-Jones, T., Barnett, J., Konrad, W., Enander, A Constantin, M (2012). Guidance on Stimulus Materials. Deliverable 4.4 PACHELBEL FP7 project.

#### **Executive summary**

PACHELBEL WP4 "Stimulus Materials" uses findings from WP3 (Policy Assumptions) and from additional sources to prepare stimulus materials for the group-based process "STAVE" implemented in WP5. The output was material to inform and stimulate the group-based process. The material was of two types: a set of questionnaires common to all partners (EVOC/CAPA/SIMI questionnaires), and material that is issue-specific and individually produced for each country.

EVOC/CAPA/SIMI short questionnaires serve as a comparative tool between countries, giving insight on the social construction of "sustainable consumption" across the PACHELBEL population. Partners asked participants to fill out the set individually at the first meeting of the STAVE group, results were then analyzed and data were fed back for discussion by group participants at their second meeting. A "re-test" was then conducted at the third of three group meetings. The present report details the representations revealed through this methodology – but moreover the impact of applying such a technique in STAVE groups in France, Germany, Romania, Spain, Sweden and the UK (where the methodology was slightly altered).

The issue-and-country-specific material consists of an informative simulated newspaper article on the particular issue addressed in a given STAVE process, and/or other materials (for example, humorous drawings). The report details how this material was developed, and the experience of applying these stimulus materials in each country. On this basis, guidance for future STAVE processes is offered.

Foremost among observations is that PACHELBEL stimulus materials serve a purpose that is distinct from that of "group exercises" as developed in WP5. The materials contributing to the formation of a group identity, a reflexive group norm, and a shared information basis. As such, stimulus materials prepare the group for a cooperative investigative process.

Keywords	Guidance - STAVE - reflexivity - social representations -
_	sustainable consumption - France - Germany - Romania - Spain -
	Sweden - UK.

#### **Table of contents**

0. INTRODUCTION7					
	APA/SIMI – WHY THIS STIMULUS MATERIAL WAS USED. RESULTS CATION AND GUIDANCE9				
1.1. Gene	eral presentation	10			
1.1.1.	EVOC – General presentation				
	1: EVOC instrument.				
1.1.2.	CAPA – General presentation				
1.1.3.	SIMI – General presentation				
1.1.4.	Method of application in STAVE groups				
1.2. Cross	s-cultural analysis: Summary of results	17			
1.2.1.	EVOC results - summary	18			
1.2.2.	CAPA results - summary	19			
1.2.3.	SIMI results - summary	19			
1.2.4.	Judgment on the qualitative data gathered with these STAVE tools	20			
1.3. Expe	rience of applying EVOC/CAPA/SIMI in STAVE Groups – Country-by Country				
1.3.1.	France				
1.3.2.	Germany				
1.3.3.	Romania				
1.3.4.	Spain				
1.3.5.	Sweden	26			
1.4. Gene	eral guidance on the use of the EVOC/CAPA/SIMI questionnaire set				
1.4.1.	Positive benefits of applying the EVOC/CAPA/SIMI questionnaire set:	28			
1.4.2.	Possible negative aspects of applying the EVOC/CAPA/SIMI set (and counter-reflections)	29			
1.4.3.	Suggestions to consider for future practice:	30			
	all assessment and guidance on the use of structured questionnaire sets in the STAVE				
cont	ext	33			
_	ULATED NEWSPAPER ARTICLE – WHY THIS STIMULUS MATERIAL ; DEVELOPMENT, RESULTS OF APPLICATION, AND GUIDANCE 36				
2.1. Meth	nod proposed for development of the simulated articles	37			
2.2. Expe	rience of developing newspaper articles – Country-by-country				
2.2.1.	France				
2.2.2.	Germany				
2.2.3.	Romania				
2.2.4.	Spain				
2.2.5.	Sweden	41			
-	rience of applying newspaper articles in STAVE groups – Country-by-country				
2.3.1.	France				
2.3.2.	Germany				
2.3.3.	Romania				
2.3.4.	Spain	45			

2.3.5.	Sweden	46
2.3.6.	UK	46
2.4. Ove	rall assessment and guidance on the use of simulated newspaper articles in the STAVE	
cont	ext	
2.4.1.	Positive benefits of using the simulated newspaper article:	47
2.4.2.	Potentially negative aspects of using the simulated newspaper article (and	
	suggestions for alleviating these):	48
2.4.3.	Issues and questions to consider for future practice:	49
3. OT	HER CONTEXT-SPECIFIC STIMULUS MATERIAL – WHY THIS	
_		
	S MATERIAL WAS USED; DEVELOPMENT, RESULTS OF	
APPLICAT	TION, AND GUIDANCE51	
· · · · · · · · · · · · · · · · · · ·	erience of choosing or developing other stimulus material – Country-by-country	
3.1.1.	France	
3.1.2.		
3.1.3.		
3.1.4.		
3.1.5.		
3.1.6.	UK	52
	erience of applying other stimulus material in STAVE groups – Country-by-country	
3.2.1.		
3.2.2.		
3.2.3.		54
3.2.4.	UK	54
	rall assessment and guidance on the use of other stimulus material in the STAVE	
	ext	
3.3.1.		
3.3.2.	-0	
3.3.3.	Some proposals for further stimulus material	57
4. OV	ERALL REFLECTIONS ON THE ROLE OF STIMULUS MATERIALS IN	
	VE GROUP CONTEXT58	
IIIE SIAV	E GROUF CONTEXT	
4.1 Sign	ificant to knowledge brokering: The reflexive dimension	го
4.1. 3ign	ilicant to knowledge brokering: The reflexive dimension	58
4.2 Tho	unique character and role of stimulus material in creating the reflexive dimension	FO
4.2. 1116	unique character and role of stillions material in creating the renexive unificusion	50
4.2 Pay	ond the reflexive dimension: other stimulus contributions	FO
4.5. Bey	ond the renexive dimension: other stimulus contributions	
5. AN	NEXES61	
	PROPOSAL OF THE STIMULUS MATERIAL BY SYMLOG AT THE	
MARCH 2	011 CONSORTIUM MEETING IN PARIS61	
ANNEV 2.	DATA ENTRY SHEET FOR EVOC/CAPA/SIMI SET 67	
AININEA Z:	DATA ENTRE SHEET FOR EVOC/CAFA/SIMI SET:	
ANNEX 3:	EVOC/CAPA/SIMI: DETAILED RESULTS OF THE CROSS-CULTURAL	
	68	

EVOC results - cross-cultural findings	68
"Before" findings (first meeting application)	68
EVOC – "After" findings (application at the third meeting)	69
EVOC – Multiple Correspondence Analysis	70
CAPA results – cross cultural findings	72
Importance attributed to "sustainable consumption"	72
Personal identification	<b>7</b> 3
Perceived capacity to act	74
SIMI results – cross cultural findings	74
ANNEX 4: FULL SET OF STIMULUS MATERIALS USED IN THE STAVE GROUP: - COUNTRY-BY-COUNTRY	8
	8
- COUNTRY-BY-COUNTRY7	78
- COUNTRY-BY-COUNTRY	8 78 83
- COUNTRY-BY-COUNTRY	8 78 83
- COUNTRY-BY-COUNTRY	8 83 93

#### **List of Figures and Tables**

Figure 1: EVOC instrument. Figure 2: CAPA instrument. Figure 3: SIMI instrument.

#### In Annex 3:

Figure 3bis: Country and application time on the MCA dimensions

Figure 4. : Importance attributed to "sustainable consumption" - comparison

across countries

Figure 5: Personal identification comparison across countries
Figure 6: Perceived capacity to act comparison across countries.
Figure 7: First meeting similitude relations, 5 countries compiled.

Figure 8: Third meeting similitude relations, 5 countries compiled

#### Table 1: SIMI glossary.

#### In Annex 3:

Table 2: Evocations before the first group meetings – All countries combined Table 3: Evocations at the start of the third group meetings – All countries combined

#### 0. Introduction

PACHELBEL WP4 "Stimulus Materials" used findings from WP3 ("Policy Assumptions") and from other sources to prepare stimulus materials for the "Group-Based Process" conducted in WP5 as a way of developing STAVE, a **Systematic Tool for Behavioural Assumption Validation and Exploration.** Three STAVE group-based processes, each comprised of 3 meetings by a group of citizens, were conducted in every PACHELBEL country.

The preparation of varied stimulus materials reflected the need to adapt STAVE to:

- the different countries and backgrounds within the PACHELBEL team,
- the different substantive issues that interest the policy partners in each context, and
- the specific planning for each STAVE trial, in response to those substantive issues.

At the same time, WP4 was attentive to opportunities for comparing the success of different options/approaches within the common framework, in the goal of fine-tuning and improving the STAVE toolbox so that it can be used after the PACHELBEL project by others.

The PACHELBEL stimulus material was developed on the basis of assumptions found in policy statements in each country context (presented in report D4.1) and also, taking into account the representational elements identified in a media analysis conducted in each country (report D4.2).

In order to assure both flexibility and comparability, work package leader Symlog worked with PACHELBEL partners to develop two sets of stimulus material:

- **1.** The **EVOC/CAPA/SIMI set** of 3 short questionnaires is common to all partners;
- **2.** A **simulated newspaper article** is made specifically for each country/partner, reflecting (or challenging) policy makers' assumptions about citizen behaviour. Using a journalistic style, personalized illustrative cases, references to controversies (while balancing points of view), and one or more photos, the simulated article condenses in a lively manner some useful data relating to the substantive issue on which each STAVE group worked.

These two stimuli were used sequentially in STAVE group sessions, and will be presented separately. The full set of stimulus materials, in country language and in English, is presented in annex, as are detailed questionnaire results.

The present deliverable report D4.4 is centred on the actual experience of using the material created to stimulate the STAVE groups. It gives a glimpse of how citizens in the STAVE groups responded to the materials and what was learned about the substantive issues addressed in each context.

To help policy makers or researchers run future STAVE groups, the present report also offers guidance on developing and using stimulus materials:

- How the materials were developed, which difficulties were encountered, which substitutions could usefully be made;
- Advice on introducing stimulus materials in a group-based process;
- Observations on how stimulus materials are helpful to building the STAVE experience for participants;
- Reflections on the impact of stimulus information when working at the policy/civil society interface.

This deliverable should contribute to responding to the following demands that emerged at the PACHELBEL Stockholm meeting (Summer 2011) in dialogue with policy partners:

- Need to clearly specify how STAVE has been implemented (evidence on different ways of implementation): this report reviews the approach taken country by country.
- Need to specify how the various STAVE toolkit components work and their capabilities: this report reviews the strengths and weaknesses of the different types of stimulus materials.
- Use of STAVE "once we are not there": this report considers how future moderators could adopt or adapt materials.
- Need to balance the most suitable STAVE components to be used according to the STAVE mode: this report describes, in moderators' own words, how stimulus materials that worked in some settings seemed less satisfactory in others.

The report, with its extensive quotes from moderators, succeeds in painting a very human portrait of the STAVE experience in each country context. It also identifies a range of technical details and pointers that can be rolled into the project legacy of a *Systematic Tool for Behavioural Assumption Validation and Exploration*.

# 1. EVOC/CAPA/SIMI – Why this stimulus material was used. Results of application and guidance.

The EVOC/CAPA/SIMI set of individual questionnaires was proposed to PACHELBEL partners in order to assure common ground for some comparability of viewpoints by participants in the group-based process of *Systematic Behavioural Assumption Validation and Exploration* in different countries.

In this project seeking to fine-tune a tool for use across Europe, there were several challenges to comparability. First there were potential national and/or regional cultural differences, affecting both researchers and citizen group participants. Furthermore, different demographic segments were drawn upon to compose STAVE groups, introducing the possibility of there being quite diverse experience, values, opportunities and aspirations among the citizens participating. Finally, each PACHELBEL country research team in consultation with their policy partner elected one or more context-pertinent substantive issues to address through STAVE, with (of course) no standardization across the project. There is no way to control, within PACHELBEL, whether the same substantive issue if discussed in e.g. Romania or in the UK would foster similar or divergent citizen reactions.

In this way, while it might be possible to compare behaviours, value statements, policy assumptions and so forth observed in different project locations, there was actually no objective basis on which to affirm that mental or social representations – citizen perceptions and assumptions about sustainable consumption - were alike or not alike. This could be considered a challenge in a project giving an important status to perceptions, assumptions and discourse as precursors to sustainability behaviour.

What was lacking was a common reference, a standalone set of material around which all project participants could orient themselves and express their own position, whichever their country and whichever the substantive issue addressed by their group. EVOC/CAPA/SIMI filled this gap. This set of short questionnaires was a rare instance of material shared across the multi-national project and providing in fact the sole common ground, in terms of content, among the very diverse participants in 15 STAVE processes (3 groups x 5 countries, as the UK researchers elected not to apply this common instrument in quite the same manner). Significantly, the questionnaire set explicitly addressed mental representations hypothesized (or indeed demonstrated in classical social psychology) to lie upstream of behaviour.

The questionnaire set was filled out by participants (working alone) in both the first and last group meeting (not in the UK). The first session responses were analyzed by the project team in the period immediately after the meeting, so that results could be returned to participants at their second meeting. At that time, participants engaged in cooperative interpretation of their own pooled data. Finally, a new round of questionnaire responses collected in the third session served as a measure of possible changes of groups' representations and assumptions as a result of the STAVE group process. While the results of the final round of analysis generally could not be returned once again to participants

(because the group sequence had closed)<sup>1</sup>, this entire procedure aimed at establishing differences and similarities between groups from different countries in relation to the common reference, one with precise meaning for PACHELBEL: citizen representations of sustainable consumption.

In what follows, the questionnaire set and its development is presented. Experience in applying it country by country is reviewed, and guidance is offered for its use (or its substitution) in future STAVE processes. A summary of the cross-cultural comparison is given, while detailed results of that comparison are delivered in annex.

#### 1.1. General presentation

#### 1.1.1. EVOC - General presentation

"EVOC" is the shorthand name given by researchers to a questionnaire-based free-association exercise that asks in sum "what does a given concept evoke for you?". The questionnaire is a classical tool used in representational studies of social psychology. This technique provides a simple, widely useable, and powerful way to identify the notions a given community shares (or does not share) about social issues – in the case of PACHELBEL, sustainable consumption. Similar techniques that qualitatively explore the meaning of an issue for these groups are equally valid for this purpose.

EVOC asked participants to write down the five words or ideas that came to their minds when they thought of "sustainable consumption". (Figure 1, next page) These ideas were then analyzed in terms of frequency (how many group members thought of the same notion) and saliency (the first words that come to mind being more salient than the last ones).

<sup>&</sup>lt;sup>1</sup> However, the Spanish team agreed with the citizen participants to organize a special 4th encounter, outside the STAVE cycle, in order to share these new results, as well as give feedback from the Policy Partners when that became available.

				EVOC Que	stionnaire				
		•		" <b>sustainable</b> come to you	consumption' r mind?	', what	are	the	five
1.									
2.	·								
3.	·								
4.	·								
5.	·								

Figure 1: EVOC instrument.

When the EVOC/CAPA/SIMI set was proposed as stimulus material to PACHELBEL colleagues at the March 2011 Paris consortium meeting, members pointed out that if EVOC was applied, as proposed, at the opening of the first group meeting, then the STAVE process would be framed for participants in terms of "sustainable consumption". Two main areas of concern were expressed by some research colleagues:

- First, the risk that delivering a concept like "sustainable consumption" would provide a particular framing of everyday practices in terms of the logic of sustainable development (rather than leaving framing open, if that were possible, so that it could be constructed by group participants).
- Second, the use of words that may be unfamiliar or appear technical or a "strange way" of describing everyday life for some people. It was feared that this could prove an obstacle to tapping into mundane everyday practices.

The following options were suggested:

- If the use of the term "sustainable consumption" is judged appropriate by a given research team for its specific citizen group, the EVOC/CAPA/SIMI set would be used with wording as originally proposed. (For instance, in the first Spanish group focused on Agenda21, "sustainable consumption" would be used inasmuch the participants had signed a Commitment Towards Sustainability).
- If the use of "sustainable consumption" presented a perceived risk for overdetermining a given group process, another expression could be substituted, such as "environmentally friendly" (for instance, this is what was anticipated to be done with the 2<sup>nd</sup> and 3<sup>rd</sup> groups in Spain involving citizens from a specific neighbourhood).

If partners decided to use another expression (rather than "sustainable consumption"), they would check with Symlog (as leader of the Stimulus Materials work package) its suitability so as to agree on as a comparable – and PACHELBEL relevant – theme.

Despite the above concerns regarding the use of the term "sustainable consumption", the 5 partners applying the questionnaire at the first STAVE meeting did adopt it as a stimulus for evocations. This turned out to be a valuable advantage, since it allowed the comparison across the different countries of participants' representation about sustainable consumption.

In the UK, after observing the experience of other country teams, the instrument was applied later in the cycle, in the third STAVE meeting. The everyday term 'environmentally friendly' was used instead of any reference to 'sustainability', considered by moderators to be too technical.

All instruments used by each country appear in annex.

#### 1.1.2. CAPA – General presentation

The CAPA instrument is designed to address the participant's personal identification with the issue, in our case, "sustainable consumption". Personal implication is a dimension that frames the representations someone has, enhancing or weakening the possibilities for action if the issue is perceived as more or less important. The self-assessed capacity to actually act and make a difference is also addressed.

This instrument (Figure 2) consists of three questions: one about the importance given to the "sustainable consumption" issue in general: "Compared to other issues, sustainable consumption is an important issue"; another question about personal identification with the issue: "Effects of non-sustainable consumption on the planet will personally affect me"; and a third question accessing the perceived capacity to act: "I can do something to increase sustainable consumption". It is this final concept, demonstrated elsewhere to be of some importance for actual behaviour, which lends its name to the questionnaire "CAPA".

The UK team reworded the instrument in keeping with their chosen approach and substantive issue (shopping for "white goods" – household appliances). The new questionnaire centred on protecting the planet and how one's personal shopping might be related to that. The UK questionnaire appears in annex.

Yes indeed	1	2	3	4	5	6	Not at all
2. Effects of <b>n</b>	on-sustai	nable con	sumption	n on the p	olanet wi	l personal	ly affect me:
Yes indeed	1	2	3	4	5	6	Not at all
1 cs macca	•						
3. I can do sor	nething to	o increase	e sustaina	able cons	umption:		Not at all

Figure 2: CAPA instrument.

#### 1.1.3. SIMI - General presentation

SIMI is another instrument used in social psychology to access the main lines of thought, or how the ideas most shared by a community are connected. If we consider the ideational elements of a representation to be bricks, the similitude relations can be said to be the cement holding them together.

The instrument consists of 12 items or notions that must be classified by participants into 3 groups of 4 items that "go together" according to the person filling out the questionnaire. Thus, SIMI aims to reveal the perceived similitude of notions.

The outcome analysis presents the absolute number of connections established between any two notions by the full set of respondents. Basically, what is important to consider is the notions' interrelationships: if they are part of the same group, "go together" or not.

The notions or items composing the questionnaire are usually derived from prior interviews in which persons are encouraged to freely talk about a certain social issue. For our research purpose, the items were drawn from the vocabulary of the substantive issues chosen by each partner, uncovered in particular in the prior Media Analysis performed by each partner (PACHELBEL D4.2). In this way, the set of notions classified by STAVE participants when they filled out the SIMI instrument were transversal to groups in all five participating countries. (Figure 3, next page)

The UK did not apply SIMI.

#### SIMI Questionnaire

You will find below twelve notions related to "SUSTAINABLE CONSUMPTION".

#### Please mark:

- '+' in front of the four notions that *best* correspond to the ideas YOU have about sustainable consumption;
- '-' in front of the four notions that *least* correspond to the ideas YOU have about sustainable consumption.

(Four of the twelve ideas should remain unmarked.)

+, - or no mark	Description
	Climate change
	Recycling and waste reduction
	Reducing carbon emissions
	Energy efficient buildings
	5. Resource conservation (water, minerals, fuel, electricity)
	Citizen empowerment for local action
	7. "Green" economy
	Organic agriculture
	Biodiversity conservation
	10.Public transport
	11.Consumption of goods produced locally
	12.Renewable energies (wind, solar, geothermal)

Figure 3: SIMI instrument.

Given that the understanding of the proposed notions could differ between countries, a glossary was developed in order to assure that if participants requested definitions, they would receive the same explanations from moderators in different countries. (Table 1, next page).

#### **Glossary for SIMI Questionnaire**

Here is a short explanation of the 12 notions forming the SIMI Questionnaire, in case you wish to check what we mean:

**CLIMATE CHANGE:** A change in usual weather patterns over periods of time. We refer specifically to the recent climate change caused by human activity, due to the increase of so-called "greenhouse gas" and carbon emissions.

**RECYCLING AND WASTE REDUCTION: Recycling** covers both *sorting materials* (paper, metal, glass, plastic) for reprocessing, and *direct re-utilisation* of goods that would have been thrown away otherwise. **Reduction** means generating less domestic or industrial waste that will have to be buried or incinerated.

**REDUCING CARBON EMISSIONS**: Reducing the amounts of greenhouse gases or carbon put into the atmosphere by reducing the amount of fossil fuel burnt for transportation, industrial production, energy production, heating, and so on.

**ENERGY EFFICIENT BUILDINGS**: private or public buildings well-insulated to better regulate the temperature inside, thereby reducing the need to heat or to cool them.

RESOURCE CONSERVATION (WATER, MINERALS, FUEL, ELECTRICITY...): Reducing the usage of non-renewable or precious resources in order to preserve them.

**CITIZEN EMPOWERMENT FOR LOCAL ACTION**: Encouragement for local citizen participation, fostering local debate in communities.

"GREEN" ECONOMY: An economic system that targets the improvement of human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.

**ORGANIC AGRICULTURE**: Food production that excludes or strictly limits the use of manufactured chemical fertilizers, pesticides, hormones, livestock antibiotics, food additives, and genetically modified organisms. Organic farming instead uses manure and compost, crop rotation and biological pest control.

**BIODIVERSITY CONSERVATION**: Protection of the natural diversity of fauna and flora by performing less environmentally damaging actions.

**PUBLIC TRANSPORT**: Collective means of transportation like the metro, busses, trams, public bicycles and every kind of public means offered by local authorities, thereby reducing the use of individual vehicles and reducing the overall emission of carbon.

**CONSUMPTION OF GOODS PRODUCED LOCALLY**: Reducing the need for long-distance transportation of goods, and reinforcing social equity (since local producers benefit more than low-paid workers in systems with many middle-men).

**RENEWABLE ENERGIES (WIND, SOLAR, GEOTHERMAL):** Energy sources that emit less carbon and that are inexhaustible.

Table 1: SIMI glossary.

#### 1.1.4. Method of application in STAVE groups

Symlog proposed the instrument set could be used as a "warm up" exercise prior to the group activity (i.e., when citizen participants arrive at the meeting room and while they are waiting for everybody to be there so the meeting can start). As mentioned, the instrument was applied twice, at the opening of the first meeting and third meeting.

Project partners translated the main questionnaire from English into their own language (translated questionnaires are found in annex). The paper-and-pencil instruments were then offered to participants at the immediate opening of the first meeting, and then, during the third meeting (timing as scheduled by moderators in each case – at beginning or at end). EVOC and CAPA tools were presented on the same first page of the questionnaire and, once those were completed, participants received the SIMI tool. This separation was performed in order to assure that participants would "think freely" and not copy elements from the SIMI tool into the EVOC questionnaire.

After the first meeting, the five country teams using EVOC/CAPA/SIMI translated the questionnaire replies into English and submitted them to Symlog for processing, using an Excel sheet template (Annex 2). Then, all the data were processed in English by work package leader Symlog. Before each partner's second STAVE meeting took place, Symlog returned processed data in the form of a powerpoint presentation, including keys for interpretation. Partners translated these powerpoint interpretations and during the second meeting, presented them to participants. Discussion then took place among the participants. Overall, the development and data processing activity triggered partner discussion around topics that were important for partners, their policy partners and citizen groups. This is reported country-by-country below.

Data from the third meeting were processed in a similar way but generally results were not conveyed to participants (Spain forming an exception by organizing a 4<sup>th</sup> feedback meeting).

Note that in order to accommodate flexibly different views and objectives among the research consortium, it was allowed that any team could decide not to apply the EVOC/CAPA/SIMI set, or to alter the selected wording. The UK implementation of EVOC and SIMI was carried out in quite a different manner from others, as will be reported below. Notably, the two questionnaires were filled out in the 3<sup>rd</sup> STAVE session meeting and the results compiled immediately for discussion (without any computer-generated presentation of results). The UK team did not apply SIMI.

Before looking into the effects of these questionnaires and responses upon the STAVE implementation in each country, we present below and in annex the results of a cross-cultural analysis.

#### 1.2. Cross-cultural analysis: Summary of results

Because France, Germany, Romania, Spain and Sweden all used the same instrument, it was possible to compile the data and perform a cross-cultural analysis<sup>2</sup>. For each of the three instruments, EVOC, CAPA and SIMI, we looked at

\_

<sup>&</sup>lt;sup>2</sup> The UK data were necessarily excluded as those were collected in a non-comparable way.

potential "before-after" differences (comparing results from first and third meetings). We also looked at potential differences between countries.

The full analysis of the cross-cultural data is shown in the annex to this report. Main results are summarized here.

#### 1.2.1. EVOC results - summary

Taking the five countries together, when participants walked into the room for the first time at the first STAVE meeting, the ideas they were most likely to write at the top of the EVOC questionnaire were the following: 'renewable' (spontaneously named by 43 persons out of 75 participants overall – equivalent to 57% of persons responding), 'conscious consumption' (cited by 35 persons), 'saving' and 'recycling' (each, 32 persons). These may be considered the ideas about sustainable consumption that are most widely shared across the European countries. More ideas cited by a good number of persons from the "top of their mind" were 'waste reduction' (18) and 'energy saving' (16). Alongside these most consensual, readily available ideas, are those that come to mind "further down the list". Here, 'long term' stands out (21 persons).

Certain notions which appear to be little shared across Europe, may in contrast be quite typical in a certain country in particular. This is the case with notions such as 'climate change' (commonly found near the top of EVOC questionnaires filled out in Germany) and 'future generations' (shared by groups in France).

When the tool is used again in the third session, 'renewable' and 'recycling' have become less immediate – they move down to the bottom of the questionnaire paper, although quite a large number of people do cite them (respectively, 42 and 44). As such these remain solid components of the social representation of "sustainable consumption". However, the "top of mind" notions have partially evolved, perhaps as a result of the discussions and the diary activities etc. that have taken place across the STAVE meetings: 'energy saving' is now dramatically at top of list, for 40 persons; 'saving' remains high on the list for 34; 'resource conservation' moves into a high list position for a solid group of persons (31), "conscious consumption' appears again for fewer (26 persons). 'Insulation' (19) is also seen.

A factor analysis was performed in order to grasp what distinguishes countries when all the data, from first and third meetings in the five countries, are compiled. This analysis yielded two principal factors, dimensions or organizing principles.

The most striking dimension or organizing principle contrasts

- pragmatic elements that are intrinsic to a sustainable way of life, such as 'local commerce', 'quality' and 'reuse', against
- elements that seem to be **higher-level**, and seemingly related to the iconic ideas of sustainability that are often depicted in the media (i.e. ecology, wind power and solar power).

Swedish participants' evocations were particularly related to the pragmatic pole, while Spanish and even more so, Romanian participants' representations clustered around the higher-level notions.

<sup>&</sup>lt;sup>3</sup> This is a catch-all phrase in which were categorized such notions as "thinking about what you consume" or "paying attention to how much I consume", etc.

The second, less striking dimension or organizing principle contrasts

- **concrete** ideas related to sustainability, such as 'pollution', 'consumption' and 'carbon emission', against
- **immaterial** ideas, related to values and attitudes, such as 'respect', 'change in habits', 'consciousness' and 'new thinking'.

German and Spanish responses were more likely to express such concrete ideas, while the immaterial pole correspondents better to the French participants' representations.

The same factor analysis allowed "before" and after" EVOC results to be compared. As might be anticipated from the summary above, those two sets of results were not extremely differentiated. They are hardly contrasted on the dimensions that differentiate the countries so markedly. Very clearly, the country where the evocations were produced entailed a much higher variation in data than did time of application.

All in all, the different tendencies observed suggest that a particular influence upon such representations, that is, public discourse about sustainability, may vary quite a bit in the five countries or at least in the environment of the persons who participated in the PACHELBEL groups. Despite a common legal frame and set of goals relating to sustainable consumption, the social and material contexts in which sustainability practices take place may be very specific to European member states.

These data, although simply indicative, still suggest strongly that the context in the four countries may be quite different and that keys to changing behaviour may in consequence be quite divergent as well.

#### 1.2.2. CAPA results - summary

We observed above for EVOC that the differences between responses "per country" were greater than the detected change between "before" and "after" applications. The same pattern of results was found for the compiled data of the CAPA instrument measuring the personal identification with sustainable consumption, and perceived capacity to act. Among the five countries, statistically significant differences were seen: Romanian and Spanish participants were more apt to state that they would be affected by non-sustainable consumption. Romanian and French participants were more apt to feel they had lesser capacity to act.

As for the importance attributed to "sustainable consumption", no statistically significant differences were seen among countries or "before or after". In all cases, the issue was thought to be relatively important.

#### 1.2.3. SIMI results - summary

Before the group sessions took place, the most central notions (better connected) revealed through this questionnaire were 'recycling and waste reduction', 'renewable energies' and 'climate change'. Apart from 'climate change', these SIMI results largely confirm those found in EVOC.

As for the second administration of SIMI, results show that the same essential elements from the first meeting are still very important at the third meeting. In these "after STAVE" results appear some new 'leading' notions, which may denote the emergence of newer meanings. These new important elements are 'reduction of CO2 emissions' and 'resource conservation', and 'energy efficient buildings', connected by 4 arrows. Again, these notions are not distant from the EVOC results. Overall, there is an apparent slight enlargement in focus to more concrete notions at the third meeting.

Such an evolution was more pronounced in some country contexts. For instance, in Spain it was found that "From general and nonspecific experience at the first meeting, participants show more consciousness of the complexities implied in sustainable consumption at the third meeting".

#### 1.2.4. Judgment on the qualitative data gathered with these STAVE tools

The overall cross cultural analyses show that for EVOC and CAPA, there was little difference found in replies before or after the STAVE experience. A particular group might very well find interesting differences to discuss, but the sum of experience seems to indicate that most likely, the first administration gives sufficiently characteristic or communicative results for each country. This suggests that in future STAVE applications it may not be necessary to perform two administrations of these tools.

On the other hand, there is **interest expressed among moderators**, **policy makers and potentially participants to be able to visualize evolutions in representations across the STAVE cycle** (differences or evolutions that may have been blurred by the compilation of large amounts of cross-country data here). Perhaps new tools, quite capable of measuring such changes, could be identified and integrated into the STAVE toolbox. Meanwhile, when that interest is expressed, EVOC and CAPA (the easiest to apply tools compared to SIMI) can certainly be administered again. This could be performed at the beginning of the third session, and a quick calculation made (as will be seen was done in the UK) to reveal results immediately for discussion.

Such discussion with participants can be of great value for STAVE. Indeed, it was found in several contexts (see country-by-country reports below) that:

 For EVOC as for SIMI, primary results (first administration) seemed more "general" whereas the STAVE process (discussions, activities...) allowed participants to express more concrete, explicit ideas at the second administration.

Noticing and analyzing this evolution could reinforce it, and give rise to more insight as to how sustainable behavior can actually be initiated.

 For CAPA, ratings changed little from the beginning of the STAVE process to the end. Despite the whole group process through which participants became more aware of how they can act in a more sustainable way, this did not change their mean rating of these issues (already high at the beginning of the process).

This tool highlighted, in some groups, a particular gap between the perceived capacity to act (question 3) and actual behaviours as recorded

by diaries, and reviewed in discussions. While barriers towards behaving sustainably clearly emerged, the "rating" in the questionnaire did not change much. Here again, policy insight can be gained by observing the distance in some contexts between people's persistent optimistic belief in their capacity, and the actual record.

## 1.3. Experience of applying EVOC/CAPA/SIMI in STAVE Groups – Country-by Country

Valuable reflections were received from group moderators in all six STAVE countries where the questionnaire set was applied (although with a different approach in the UK). The experience of actual administration is reproduced in the words of the moderators.

Furthermore, when pertinent, we include direct comments gathered from Policy Partners who attended the Stockholm Meeting of the PACHELBEL Consortium in Summer 2011.

#### 1.3.1. France

EVOC/CAPA/SIMI was applied in all three French STAVE groups, with a slight variation of the initially planned schedule. In fact, in STAVE group 1, the questionnaire was applied in session 1 and 2 (and not in session 3). This was because we wanted to experiment, within PACHELBEL, potential impacts of one group meeting on citizen's answers. In STAVE groups 2 and 3, the questionnaire was applied as planned, in session 1 and 3.

The questionnaire set was each time administered at the very beginning of the sessions as a warm-up exercise (especially useful when beginning the STAVE process) but also in order to avoid any potential group influence.

Moderators explained how the questionnaire was structured and that it included a glossary for SIMI that could help them if they had any doubt about a meaning. This explanation was repeated at the second administration and participants welcomed this short reminder before filling it in for the second time.

#### Observed behaviours of participants when filling it in:

We could observe that some participants used the glossary (included at the end of the questionnaire) while others completed the questionnaire straight away, without consulting it. This was observed in both administration sessions. At the end of the second administration, one participant asked us if she could take the glossary home because she found it particularly clear and thought that it would be a good document to have in hand when discussing about sustainability with her children.

The first administration session didn't raise any questions from participants who filled it in quietly and studiously.

During the second administration, groups 1 and 3 showed similar behaviours. In group 2, however, the second administration created some tensions. Indeed, right at the beginning of the task, one participant said that she had a problem with this questionnaire and in particular with the terms 'consumption' and 'sustainable'. As she was quite angry, moderators tried to understand where, why or how the 2 words 'sustainable' and 'consumption' caused her problems. As she got more and more upset (creating at the same time a certain discomfort among

other participants) we suggested to stop here the interaction and get back to her once the questionnaire set was completed by all (explaining that it was important to fill it in without any group influence). We then got back to her to hear what she had to say and this generated rich group discussions and also relaxed the atmosphere. Participants were attentive to her statements, communicating at the same time a benevolent attitude towards her. Discussions keyed on the following themes: Impact of individual, isolated behaviours in comparison to the impacts produced by the business or public sectors; the importance of collective rather than individual action; anger at being considered as a simple consumer and not a citizen...

#### Questionnaire results:

Results show that group participants are highly sensitive to sustainable consumption, although we can observe some variations in the level of this sensitivity among the groups. STAVE 1 participants (our oldest citizen sample, living in a rural region of France) show the highest sensitivity in regards to sustainability: while differences among groups are not statistically significant, on the face of it participants of this group more often declare that sustainable consumption is an important stake; that they feel personally concerned about the impacts of consumption; and that they personally feel capable of acting in favor of sustainable consumption.

A particularity of STAVE 1 was that the rural participants view public transport as a very central and strategic issue linked with sustainable consumption. Participants of this group live in a rather isolated small city which can explain this particular concern about transportation (i.e. the need to use private rather than public transport). They explained at length how Chateau-Renault, their city, is 30 km from Tours (the regional capital) and of Vendome (the city with the high speed train).

Overall, participants spontaneously associate "sustainable consumption" with the following aspects: Resource conservation, energy savings, natural resources, renewable energies, future and future generations, respecting the environment, reduction of CO2 emissions, organic agriculture, the need to change, the need to consume in a better way.

Furthermore they connect "sustainable consumption" with the following dimensions: Local capacity for action, consumption of products produced locally, recycling and reduction of waste, reduction of CO2 emissions, protection of biodiversity.

#### Feedback and participants' reactions:

EVOC/CAPA/SIMI results were fed back twice for STAVE group 1 (as we had applied the questionnaire within the 2 first group sessions) and only once for STAVE group 2 and 3 (as groups ended after session 3). Feedback was presented using powerpoint slide shows. All group participants appreciated getting feedback.

EVOC data did not raise any questions from participants. Participants quietly listened to the results. We probably can consider that the presentation of EVOC results acted more like group information. Points of view are registered and/or taken into consideration by participants rather than being a subject of discussion (no controversies within the group about the various evocations). NB: Participants knew in advance that the subject of the group discussions was to be on energy savings (information given in the recruitment phase). Thus, we can

consider that participants were not totally "naïve" when entering the room. Their answers were probably a little conditioned by notions of "energy" and "savings".

CAPA feedback was listened to quietly as well but with the capacity to go beyond simple registration of that information, as it was observed that group learning was also transformed into immediate action at home (this was visible both in the diaries and during group discussions).

Regarding SIMI data feedback, we had two types of reactions.

In STAVE Group 1, the results generated an in-depth discussion with the group. It enabled moderators to better understand the local context, the individual constraints/difficulties as well as their individual everyday behavior. Participants were quite creative and interested in exploring all together the meaning of the connections they made individually and shown as a group result. Starting with the transportation issue (already mentioned above), the group discussion shifted to wider spheres, directly connected to local policy and decision making, starting with transportation and continuing on to other subjects like city electricity consumption and public energy waste. From this point participants raised the need to be more "collective" minded, saying that energy saving is the matter of a collective effort and not only achievable through individual efforts.

In STAVE groups 2 and 3, participants had much more difficulty in finding the meaning of what they had connected individually and that was then presented as group results. They asked a lot of questions about the SIMI research methodology and moderators felt that they were a little frustrated at the end as they could not reflect on the results. For example, they couldn't understand at all the connection that was revealed in their data between Architecture and Organic agriculture.

#### **1.3.2. Germany**

We administered the EVOC-CAPA-SIMI set and discussed answers in the first session of all three STAVE groups. The original idea was to quickly go through the questionnaires and let people just say some answers without discussing them. But participants of group 1 felt unsatisfied by this approach and instead of relaxing the atmosphere people got a bit puzzled. They had no or only a vague idea why we asked them to fill in questionnaires on sustainable consumption because they had expected to join a discussion on energy use at home. So the facilitator had to do some persuading in order to prevent people from getting bored when we requested them to proceed with reading the simulated article (the second stimulus material provided).

Thus, we chose to provide groups 2 and 3 with more time for discussing answers and now the exercise worked well in creating a positive group feeling, namely for two reasons:

- → While talking about sustainable consumption, participants started to perceive that this topic is also related to energy use, and so they could make sense of EVOC-CAPA-SIMI exercises.
- → The first interactions about the general topic of sustainable consumption were a good warm-up for the later conversations about details of everyday life at home. In other words: starting with a topic that was not directly linked with participants' real lives helped them to get rid of possibly existing inhibitions about revealing private habits.

Session 2: We started with a brief report about the results from the EVOC and CAPA questionnaires using two analytic charts (prepared by Symlog) which we circulated as handouts. To keep things straightforward, we focussed on these two tools as we felt they are easiest to understand and provide sufficient insights into the group's ideas on sustainable consumption. People were interested in the results. In particular they wanted to know whether and how their own group differs from the other groups (CAPA). But as we had already had detailed discussions on sustainable consumption during the first meetings, we administered no discussion on the results and left it at some questions.

#### 1.3.3. Romania

The results of the questionnaires EVOC/CAPA/SIMI were presented for each group in Session 2:

- for CAPA with a representation at each group level;
- for EVOC and SIMI with a global representation (all Romanian groups included).

The citizens were interested in the score of their group and some of them in the contribution by their own group to the general view of sustainable consumption.

One of the questions raised by participants from all groups was "may we compare our results with the results of other countries involved in the project?" and for EVOC and SIMI "what are our group results compared with the other two Romanian groups?".

These questions may reveal their curiosity to know how their answers compared with the others and also an attitude to contribute to the process. We make a connection with another question "what are the final results of the European project? Is our contribution relevant for the project?" raised by a citizen from the first STAVE group G1.

Some of the citizens investigated the concept of sustainable consumption on the Internet and returned to subsequent meetings feeling more familiar with the meanings. A link with climate change was introduced by few citizens and provoked controversial discussions tempered and finally stopped by the moderator, as it was not our intention in the 2nd meeting to debate the issue.

We also administered the questionnaire at the end of the 3<sup>rd</sup> group session in each case, but we didn't produce the comparison.

The questionnaire set worked properly. Clear formulation of the questions was an advantage, as was the simplicity of the requirements to fill or mark the answers. Some difficulties, but not major ones, appeared in G3 in the case of EVOC.

It worked well as stimulus material since the citizens were brought to reflect on sustainable consumption issues before the debate.

#### 1.3.4. Spain

We applied the EVOC-CAPA-SIMI at the very beginning of the first session of all three STAVE groups, but without discussing the activity or the materials; we just gathered the data – as we were a bit concerned with the available time. We told participants they would see the results in the next session.

Participants actually completed it in about 5 minutes, such that the session was not interrupted.

From the analysis of the STAVE 1 transcripts (sessions 1 and 2) we have no empirical evidence to confirm that these exercises generated distortions in the speech of participants.

We then re-administered the EVOC-CAPA-SIMI tool at the very end of the third session, just before participants left.

The possibility of comparisons between the first and second implementation of EVOC, CAPA, SIMI exercises makes them an interesting tool for, on the one hand, monitoring the effectiveness of STAVE as a learning process of participants, and on the other hand, illustrating the value added by qualitative data to the data coming from more structured questions such as those from CAPA.

One interesting methodological contribution arises from group discussion in the STAVE 1 group composed of shopkeepers. It deals with the validity - or respondents' "interpretation" - of the questions from the CAPA exercise (questions that could fit perfectly in a survey on environmental citizen attitudes). The results of the CAPA exercise in the first session with the shopkeepers' group registered extremely high values. However, the qualitative data coming from diaries and group discussions showed us that shopkeepers, in fact, seem to be caught between pressure from the majority of their customers (who, they say, are poorly environmentally-conscious) and the lack of assistance from the public administration. Thus, they demonstrate in fact a certain incapacity to influence sustainable consumption, although in questionnaire responses they stated they could carry this influence. The most plausible explanation for this inconsistency between qualitative and quantitative data might be that participants were responding to the CAPA questionnaire what they thought they should say, not what they were really thinking. That is, we might have a social desirability issue in their responses. Another possible explanation could be that participants were responding to CAPA's questions thinking what they would really like (aspirations), and not what was actually happening.

This result could be an example of how qualitative data can help both to assess the validity of items and indicators of a questionnaire, as well as to generate new ones. On the other hand, it is interesting to observe how the average value of question 3 from the CAPA questionnaire decreased from 5.8 to 5.25. in the STAVE 1 shopkeepers group. This does not mean that participants are less able to foster sustainable consumption after the group discussion. On the contrary, it may indicate that after group discussions participants are more aware, precise and sincere when answering this sort of question posed by a questionnaire. They may have a better view of exactly what is required to be capable of influencing sustainable behaviour, and a level of comfort with assessing their own capacity.

When receiving the results from this group, policy makers drew attention to the fact that their department had spent a lot of money to conduct a survey with shopkeepers, and that the information they had obtained from that large survey was less useful than the information they obtained from the STAVE questionnaires and activities.

#### 1.3.5. Sweden

We ran the EVOC/CAPA/ SIMI questionnaires as designed. The first two were quite quickly filled in, whereas there were a few questions regarding the wording in the SIMI tool. In this case the glossary proved useful.

Several participants commented that it was hard to choose away concepts (putting the minus sign next to notions that describe "least well" their idea of sustainable consumption). Some discussion started up when filling in the SIMI form.

This first stimulus package (EVOC/CAPA/ SIMI) was a good warm up for the coming sessions. The participant seemed to be pleased that we would feed back the results to them the next time.

In the second meeting with participants we did not show all the presentation material provided by Symlog, but only the diagrams and used these to discuss the results. These discussions were quite extensive in all three groups. We mentioned that participants in all the other countries in the project were also completing the same materials, and our group members tended to think that they would have the "best" results. In this way ideas came up about how Swedes behave in relation to environmental issues:

"But isn't this something which is rather ... could be a bit typical for Sweden? We are always, we want to be ahead, we want to influence regarding the environment, but then on the other hand we say 'Yes, well it is not so bad here, because we already have done so much'. But we want to influence more."

The administration of EVOC-SIMI-CAPA at the end of the third session raised no discussion.

#### 1.3.6. UK

In the UK, the policy collaborators were especially interested in investigating indigenous understandings and naturalistic behaviours with respect to the purchase and disposal of domestic appliances (or 'white goods'). The underlying policy agenda here was to use such insights to develop means to encourage the use of longer-lasting appliances and the reduction of waste. In designing the detail of the first STAVE trial, the UK project team took the view that implementing EVOC/CAPA/SIMI devices early in the STAVE process would have the effect of framing subsequent discussions in terms of sustainability issues. This would counter their intention to allow the participants as much freedom as possible to determine the terms under which 'shopping for white goods' would be discussed. In other words, the UK team wished the framing(s) to emerge naturally, and reflect, as far as possible, everyday discourses and considerations that reflected everyday domestic practices. For these reasons, they decided not to use the EVOC/CAPA/SIMI set in implementing the first UK STAVE trial, STAVE1.

At the consortium meeting in Stockholm, the UK team were particularly interested in the Spanish group's accounts of their experiences of implementing EVOC etc. Here, it seemed (and as reported above), a contrast could be found

between aspirations of sustainability-related conduct, as elicited by EVOC etc., and arguably more grounded accounts of behaviour revealed by subsequent diary-keeping and detailed discussion. It was decided to include a UK version of EVOC and CAPA in the subsequent UK STAVE2 and STAVE3 trials. Rather than deploying the EVOC/CAPA at the start of the STAVE process, they were implemented towards the end, during the third STAVE group meeting. The thinking here was to use the EVOC/CAPA exercise as a means to re-frame the discourse in terms of sustainability issues, and then to observe what happened. It was felt that the SIMI tool was a little complicated, and would not play a useful role in the way that we planned the group processes to unfold.

The UK versions of the EVOC and CAPA tools are shown in annex. Note that the everyday term 'environmentally friendly' was used in preference to what seemed more technical terms using the word 'sustainability'. The CAPA questionnaire was rephrased to some extent.

As we anticipated, the implementation of the EVOC and CAPA tools had the effect of re-framing the group conversations for both STAVE2 and STAVE3. Before we put green issues on the agenda by the use of the EVOC/CAPA devices, two modes of rhetoric had been deployed by group members in order to account for dismissing green issues, or simply ignoring them:

- 'The government sorts it out' (in other words, this is a matter that is addressed through government action/regulation, which makes the action of the individual citizen irrelevant).
- "All machines these days are highly efficient, all products are 'much of a muchness'" (meaning that all product designs are now 'green', with little to choose between them).

There was also some hostility to green issues expressed by individual participants, which although not contradicted by others in the groups, failed to elicit a widespread sense of antagonism. These negative sentiments took the form of expressions of a sense that green issues were a fashionable trend, or perhaps a fad that now felt a little old-fashioned.

After green issues were raised in the group discussions by the presentation of EVOC/CAPA by the moderators, the shift in framing was dramatic, involving all participants, with some remarking how 'everything seems quite different now'. This led to discussions in which we observed a number of ways of dealing with this challenge to the pre-existing mode of discussion, which had been completely dominated by economic considerations, cost effectiveness, and the fashion and aesthetic-related desirability of certain commodities:

- 'I would like to do my bit, but it's not a priority' (in other words, a
  resistance to being seen as denying the importance of green issues,
  but combined with a realism about whether these considerations were
  likely to have much practical influence on behaviours)
- "Getting 'silly' about the environment" (green issues as a somewhat trendy, rather impractical, way of looking at things)

- 'Bacteria left because washing at too low a temperature' (a news item latched upon as an exemplar of the possibly damaging consequences of a fashionable adherence to green practices)
- 'Things are much better now' (green issues were important, once upon a time, but they resulted in positive change, so concerns about these issues are no longer needed)
- 'These issues are not so fashionable' (once upon a time it was socially necessary to be seen to support green values, but now only extremists are interested)

These modes of rhetoric may be seen to provide resources for social accounting practices, in which the participants were able to justify their lack of interest in, or practical engagement with, issues concerned with sustainability.

The discontinuous shift in the discourse following the introduction of the EVOC/CAPA devices seemed to simply elicit a slightly sentimental recognition by participants that perhaps they should be seen to have some regard to green issues in their shopping practices. This posed them with a challenge of how to reconcile their previously expressed views (over the space of two and half meetings, and as captured on the oval map) with what might in some quarters be regarded as a more socially-acceptable orientation towards green issues. As noted above, this challenge was resolved in part by the deployment of variations on social accounting practice rhetoric. There was also a great deal of agreement on the impracticality of the adoption of green lifestyles, given participants' limited resources (this was heard in both groups, whose average income probably differed quite considerably).

The EVOC/CAPA implementation of course provided no means to observe whether the shift in discourse would or would not be accompanied by any shift in everyday behaviours.

## 1.4. General guidance on the use of the EVOC/CAPA/SIMI questionnaire set

We reflect here the general lessons learned about applying this specific questionnaire set in the context of the citizens' groups organized by PACHELBEL. We consider how this precise stimulus material "worked" as part of the STAVE dynamic. All the comments below were submitted by the group moderators.

## 1.4.1. Positive benefits of applying the EVOC/CAPA/SIMI questionnaire set:

**France:** EVOC/CAPA/SIMI questionnaire showed good value for the STAVE dynamic.

- The questionnaire was welcomed, which is a positive impact in itself: the tool interests participants
- The glossary provided clarifications for some of the participants, making it easier for them to respond

• Even if this is not immediately visible, the questionnaire and its glossary provide a common vocabulary to the group, thus facilitating the group dynamic and cohesion.

It can be quite informative to engage participants in thinking about the potential impact of upstream attitudes regarding the actual importance of some social issue and whether or not they can "do anything about it".

**Germany:** When we allowed more time for discussing answers the exercise worked well in creating a positive group feeling. The first interactions about the general topic of sustainable consumption were a good warm-up for the later conversations about details of everyday life at home. In other words: starting with a topic that was not directly linked with participants' real lives helped them to get rid of possibly existing reservations about revealing private habits.

**Romania:** It worked well as stimulus material since the citizens were brought to reflect on sustainable consumption issues before the debate.

**Sweden:** The feedback from the questionnaire set was given directly after feedback on the diaries (meeting 2) and these complemented one another nicely.

**Spain:** The possibility of comparisons between the first and second implementation of EVOC, CAPA, SIMI exercises makes them an interesting tool for, on the one hand, monitoring the effectiveness of STAVE as a learning process of participants, and on the other hand, illustrating the value added by qualitative data to the data coming from more structured questions such as those from the CAPA.

For policy makers, the SIMI result was of special interest.

**UK:** The shift in rhetoric produced by the re-framing introduced with the EVOC/CAPA task, delivered much information on social accounting practices among the UK participants (see detailed report above).

## 1.4.2. Possible negative aspects of applying the EVOC/CAPA/SIMI set (and counter-reflections)

Again, comments are in the words of moderators (sometimes reporting feedback from policy makers).

**Germany:** I would recommend using in a STAVE meeting only one or two EVOC/CAPA/SIMI type questionnaires in order to limit the amount of data that needs to be analysed and interpreted. I guess if STAVE entails too many exercises and tools, policy makers will be sceptical about its applicability in policy processes.

**Spain**: The output of the SIMI exercise is not very intuitive. It is difficult for participants to read and understand (observers of the session noticed how some participants snorted when viewing the slide). For policy makers, however, this result was of special interest.

**Sweden**: One problem can be that we ourselves/ policy makers lack the instruments or knowledge to compile the group results from EVOC/CAPA/SIMI. Once the analysis is available it is easier to discuss with the groups and to identify patterns among the participants.

UK: It really depends on what function STAVE is expected to perform. The environmental framing generated by EVOC/CAPA/SIMI as applied in most groups in PACHELBEL may be appropriate if the engagement seeks to explore views about overtly environmental issues. However, if an attempt is being made to tease out informal indigenous behaviours, articulated in everyday language, then the use of EVOC/CAPA/SIMI at an early stage in the process would seem counterproductive.

The UK policy-makers were not very interested in the results from the EVOC/CAPA exercises. This should be seen in the light of the very extensive volume of commissioned research they had already done. Note as well that we presented the findings in aggregated form. In view of their tendency to see group-based research in terms of individual actors biographies than social-shared resources (contrary to our own), it is possible that they might have liked the individual-based EVOC/CAPA analysis.

#### **1.4.3.** Suggestions to consider for future practice:

#### Modify the administration timing:

**France:** Should EVOC/CAPA/SIMI be administered at a stage where participants are still totally unaware of the subject they will discuss within the groups?

- Maybe consider applying EVOC/CAPA/SIMI (1st administration) in the recruitment phase (via an online questionnaire). This would provide the moderator with better knowledge about the group participants (before starting the group processes). The results of the 1st EVOC/CAPA/SIMI could be presented at the very first group session (time saving and efficiency: existing knowledge directly used).
- Apply the 2nd administration of the questionnaire at the end of the 2nd session and present the results at the 3rd session. This for two reasons: i/ measure the evolution of the 3 aspects after 2 sessions with a real assessment of the group effect. ii/ Give participants a feedback that is complete. Currently, participants do not have the feedback on the 2nd administration.

**UK:** EVOC and CAPA are certainly very interesting, user-friendly, and intellectually pungent tools, that form a useful component part of the STAVE tool-kit. We used the oval map as a cumulative resource throughout the STAVE process, returning to enrich it after each discussion of diary extracts and group exercises. Contrasting the oval map with the frame shift associated with the administration of EVOC/CAPA proved a powerful combination, throwing into sharp relief the contrasts between social aspirations and concrete behaviours. In this way the UK partners might suggest that the use of EVOC/CAPA be reserved to the third session and results compiled immediately by participants as we successfully did.

#### Modify the content or the use of the questionnaires:

**France:** It could be interesting to take the time to go through the glossary with the group participants in order to check and/or confirm the common understanding of the various aspects. Thus, instead of using it only as personal

elicitation tool when completing the questionnaire, it could become a shared elicitation tool that serves overall knowledge collection on the various notions.

**Sweden:** when closing the third session, when EVOC, CAPA and SIMI are filled in again, the group could also be addressed some evaluative questions as follows (the sample questions 1a&b concern a group that discussed transport):

- 1a) How would you assess your mobility behaviour in terms of sustainable development?
- 1b) Do you think you have opportunities for making your mobility behaviour more climate friendly?
- 2a) How would you assess your consumption behaviours in terms of sustainable development?
- 2b) Do you think you have opportunities for making your consumption behaviour more climate friendly?

This final question could almost function as a sort of engagement the participant sets for him/herself at the end of the STAVE process.

Several moderators recommended that as a policy tool these instruments could be "tuned to more specific issues". Thus, as suggested several times, an EVOC or free association exercise could be launched on the substantive issue addressed by the STAVE implementation:

- Germany: As part of STAVE as a policy tool EVOC/CAPA/SIMI type
  questionnaires could be linked more clearly to the overall substantive
  issue of the group. Starting on a fairly abstract level makes sense in
  the research context but could be considered as too inconvenient in a
  policy context. Aligning them more directly to the group's topic would
  not prevent EVOC-CAPA-SIMI type questionnaires to set the scene for
  the discussions.
- **France:** The questionnaire could include a further part specifically dealing with the substantive issue chosen for the STAVE groups. This could be useful to collect individual knowledge and evocations on the specific subject and used as stimulus material in the next session(s).

On the other hand, some moderators felt that some part of the STAVE application at least should preserve a more open-ended approach that can be achieved with EVOC/CAPA/SIMI:

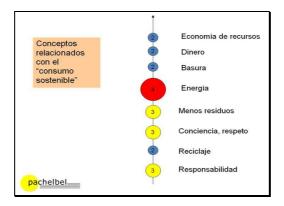
- Regarding the glossary distributed with the SIMI tool, instead of providing all the definitions it could be interesting to have a multiple choice questionnaire or open questions asking participants to define themselves the various notions in one sentence.
- Another exercise to stimulate creativity could be to invite them to describe their dream of a sustainable and/or "greener" world.

#### Facilitate processing and presentation of results:

**Spain**: We will have to think how policy makers could analyse the data from the three questionnaires in a simple way in order to introduce this information in the next session. It might be interesting for the STAVE-tool to have a small

application in Excel that could automatically produce results once the data are entered in a matrix.

EVOC results could be presented in a more intuitive way:



## Utilise other forms of structured questionnaire as an early stimulus material:

As for other structured questionnaire-type stimulus approaches, moderators interestingly included other STAVE tools in their reflection when inputting to this deliverable report. In this way, several positive comments were received regarding the "resource allocation exercise":

**Germany:** Structured questionnaires can be helpful tools to complete and complement qualitative data. My policy makers were keen about the results of the resource allocation exercise (which is not a structured questionnaire but a tool for generating quantitative data). Beyond getting insights into participants' evaluations of policy measures this exercise provided them with data about citizens' priorities in terms of most or less urgent needs for action. They found it very useful to have both types of information available.

**France:** The allocation exercise proved to be very efficient. Participants enjoyed this exercise very much. It acted as a good stimulus material. The fact to invite participants to suggest any other option they thought of stimulated their creativity and imagination. 6 additional options were proposed by participants (the table they were given initially contained 10 options)

**UK:** The resource allocation (or 'red dot') exercise also proved animating and useful in generating talk, ideas and insight.

**Spain**: as in France and the UK.

**Sweden:** Policy makers seem to like the resource allocation exercise (perhaps because it places citizens in the difficult position that they themselves experience?). This could be useful in dialogues where the use of limited resources is a main focus. It may be that policy makers feel more at home using structured instruments. On the other hand, evidence from the groups indicates that the dynamic of the group discussions contributes to richness and detail. This comparison of what emerges from different instruments will hopefully be one outcome from PACHELBEL to guide adapting the tool to the purpose.

## 1.5. Overall assessment and guidance on the use of structured questionnaire sets in the STAVE context

#### The EVOC and CAPA tools in particular can be retained and fine-tuned:

The reports above indicate that overall, the questionnaire set received a good assessment from group moderators. It served well the purpose of "warming up" groups to work together. In many cases, the act of filling out or, more often, integrating feedback from the questionnaires produced rich discussions of value in the STAVE environment.

It was commented that the very process of giving the group feedback (on EVOC/CAPA/SIMI, Diaries) acts in itself as a stimulus to group discussion and development.

As highlighted in the discussion above of cross-cultural results, EVOC, and CAPA in particular, were found helpful "uncover the gap" between what one says s/he cares about (or would like to -"aspirations), and "real" behaviours as captured by diaries and group discussions. This was found to be one of the strongest points of STAVE and EVOC/CAPA are key elements in this regard – all the more so that they play a role in making participants aware of such a gap (gain in self-awareness...), another valued outcome of STAVE.

The UK view, on the other hand, was that it is important to avoid entirely any framing introduced by such structured tasks at the outset of the group process.

Proposals above for improving the use of the questionnaire set could be grouped into several categories:

- Modify the administration timing
- Modify the content or the use of the questionnaires
- Facilitate processing and presentation of results

Furthermore, it was observed that moderators could usefully consider other forms of structured questionnaire as an early stimulus material (the example of the resource allocation exercised was mentioned several times).

The conclusion of all these evaluations was that EVOC and CAPA in particular – easy to apply and interpret, and powerful stimuli to the group process - should be retained as component parts of the STAVE toolbox.

#### Can the aim of the questionnaire set be achieved in all contexts?

The EVOC/SIMI/CAPA set aimed at providing data that are both qualitative and comparable across partners. When appropriate and desirable by policymakers, this can be achieved by using evocation (free association) exercises similar to EVOC. The main purpose of the questionnaire set is to warm up participants for talking and thinking about their attitudes and behaviour. The set also provides some hints as to ideas that participants bring into the meetings with them. While this was not observed to a significant extent in the groups trialled here, the repeat of questionnaires at the end of the sequence of STAVE meetings could in principle allow comparisons and provide insight on whether and how the group experience may have changed some ideas.

To meet these objectives however there is no fundamental requirement for a complicated tool or thorough expert analysis. Instead, any future STAVE team could perform a standard content analysis of notions collected from their participants by EVOC, and also, ask the participants to conduct their own analysis of the data (as was done in the UK). The same goes for the SIMI tool: the set of "pulled in" and "pushed out" notions instead of being depicted in a web could be easily replaced by more general content analysis.

The CAPA tool was also shown in the UK to be amenable to compilation on site and interpretation by participants. It may also be best suited among the questionnaire tools for making a quick and rich comparison between groups (when several STAVE groups are run in parallel), without necessitating a difficult calculus of results.

## Reflecting on the "stimulus" role of the questionnaire sets: what was set into motion?

This review of country experience in applying the EVOC/CAPA/SIMI questionnaire set has shown that in general participants were willing to fill out such instruments and participate in the feedback of results. The semi-quantitative data were interesting and informative in themselves, and they allowed more understanding of other, qualitative data collected in group exercises. In some cases they highlighted an evolution across the STAVE process towards a more concrete, explicit representation of sustainable consumption.

Moderators suggested as well several ways of adjusting, amplifying, or substituting these structured questionnaire sets for future applications.

Not insignificantly, the set of questionnaires tapped precisely into the social representations that in some cases are identified as important precursors to individual behaviour. Still, they were not a measure of such behaviour. The questionnaires did not ask participants about their physical behaviours in regard to the substantive issue addressed by their STAVE group (such empirical questions were posed instead in the exercise materials developed for the group-based process, such as the individual diary kept between group meetings). Indeed, moderators mentioned in several instances that little direct connection could be made between the "intentions" expressed through the questionnaire replies, and the actual behaviours recorded.

Instead, EVOC/CAPA/SIMI asked participants to reflect precisely on the upstream representations and attitudes that shape – or perhaps contradict – their behavioural responses. The questionnaire results in some cases triggered awareness of a gap between intentions and actions – in a gentle manner that could be examined without resistance by participants.

In this way, the questionnaire set asked participants to observe themselves in a reflexive manner. EVOC/CAPA/SIMI, through asking literally (in the first group session) how each individual thinks about and orients him/herself to sustainable consumption issues, engaged each participant in a research stance. The tools were simple, interesting and profound at the same time – offering an invitation to enter a special new (if temporary) world of self-observation and shared analytic consideration.

Results, when calculated and then delivered in the second group meeting, offered supplementary levels of meaning to participants. In some cases participants "listened quietly" to feedback, indicating that individual thought processes were spurred. When discussion was sparked, the participants engaged together in

addressing complex data, finding correspondences between their private individual inputs (their replies to the questionnaires) and the visible group outputs (the overall data presentations). They lent their intelligence to seeking interpretations, formulating, exchanging and defending the meaning they ascribed to data presentations.

Even in cases when participants found it difficult to engage directly with the graphic data presentations, they responded well to the material as it was intended: to stimulate their thinking and discussion of (usually) the sustainable consumption topic, whether interpreted broadly or literally.

While the EVOC/CAPA/SIMI questionnaires are rather simple and easy to apply, they are far from simplistic. They offer a powerful way in to identifying and thinking about norms of representation in a given community. Using these techniques in a participative process establishes that researchers consider that all group participants can make a valuable personal and social contribution. This contribution lies in working together to systematically develop information and analyse the complex set of issues they are faced with.

This underlying attitude of confidence in the utility of their contribution was perhaps sensed by participants, and/or, corresponded to their own motivations in participating in the STAVE groups. Indeed, several moderators reported that participants were eager to know how their results compared with others found in the European project. The presence of a shared reference, in the form of these questionnaires, highlighted a sense of **European connection and social value** going beyond a simple (if remunerated) presence in three 90-minute sessions.

Because the STAVE trials in the five PACHELBEL countries using similar EVOC/CAPA/SIMI items were run at such very different periods of the year, it was not possible to provide the cross-contextual feedback that many participants desired. In future applications, if STAVE is conducted for several groups, it might be important to **provide feedback indeed on how any group compares with another or with the overall data picture**. In a similar spirit, the second administration of the questionnaire set could well be placed at the closing of the second group session, so that participants could enjoy, during the 3<sup>rd</sup> session, the **self-analysis of any transformations in the overall group data that could be ascribed to their participation in STAVE**. As in Spain, too, a fourth session could be organized specifically to deliver feedback from both the second administration of the set, and, from policy partners.

At bottom, the response to EVOC/CAPA/SIMI in PACHELBEL demonstrated that citizens are interested in obtaining feedback on their absolute and comparative position, both as individuals and as members of a community. They are interested to measure, as well, how much they change. These observations should be taken into account by policy makers as they plan campaigns to influence sustainability behaviour.

Objections were raised to these instruments in one group when certain participants showed non-verbally that they found the presentation of results to be overly complicated. Overall, however, the test of this questionnaire set illustrated that STAVE, policy "clients", and citizen participants were all well-served by stimulus material that appeals directly to their collective intelligence, while offering insight into representations and attitudes that sometimes lie just out of sight.

Future uses of STAVE may not rely on the use of SIMI, in part because its analysis requires computerized support and expert experience. In contrast, EVOC and CAPA, being quite easy to administer (or adjust) and even to compile and interpret on site, appear to be very good candidates for permanent inclusion as part of the STAVE toolbox.

Cross-cultural analysis of compiled results shows that often there was little modification in results obtained "before" and "after" the STAVE process. Possibly, too, a different exercise could be developed to allow before-after comparisons of how people think about the issues. Final decisions on which stimulus materials to include in the STAVE toolbox will be taken in the context of the Stuttgart consortium meeting in April 2012, reflecting on the sum of deliverables. There, the project Advisory Board too can offer advice.

# 2. Simulated Newspaper Article – Why this stimulus material was used; development, results of application, and guidance

The second set of material produced to stimulate STAVE groups was composed by material specific to the substantive issue chosen by each PACHELBEL research team and their policy partner.

At the Paris consortium meeting (March 2011, presentation in annex), Symlog proposed that material intended to stimulate the group-based process could be presented in the form of a simulated newspaper article, where all types of issuespecific information such as policy assumptions, opinions and quotations would be integrated.

The simulated newspaper article was presented as an easy way to combine a large amount of pertinent information in a form easy to "digest" by group participants. Instead of boring participants with a detailed lecture on an issue, moderators could be certain that a common fund of varied information was readily available in a palatable format. Typically for a newspaper article, technical data could be presented, the range of policy attitudes or individual responses to a given issue could be illustrated, and moreover societal conflict or controversy could be touched upon.

In terms of setting up a productive group dynamic, it was felt that it could indeed be useful to display the terms of controversy without actually plunging the group itself into turmoil or conveying that there is a "right" answer expected by the moderator or "wrong" position that participants should avoid. It was determined that the article ought to give a fair presentation of the substantive issue at hand. The various involved parties and options are included in such a way that no specific reasoning appears favoured.

The key issue here was to produce a narrative that a) is readily understandable for the citizens, b) links easily to everyday consumer practices in meaningful ways, c) is "alive" in the sense that it is clearly about issues to which the citizens can relate, rather than being strictly technical, academic or abstract in nature, d) has the potential to be read in several ways through different framings. For example, a given statement could give rise to the interpretation "this practice is a common part of everyday life" as well as "this practice is environmentally damaging".

For STAVE group members who do not know each other and who have no previous experience of group discussion, the newspaper article brings a familiar activity which can be reassuring and facilitate ice breaking. It provides an open common ground from which each citizen can pick up a point of view to engage in the group discussion. Then, direct reference to the article progressively fades away as the group members further develop their own reasoning.

It was agreed that each STAVE country would benefit from such an article, tailored to the needs of the citizens' group. This section discusses how the country-specific newspaper article was developed in each context. It goes on to examine how the article was applied as stimulus material in the STAVE trial, and on this basis, provides guidance for future applications of such material.

Note that the second set of stimulus materials specific to the substantive issue chosen for each STAVE group also included, in some cases, materials chosen in context by the group moderator. These supplementary stimulus materials are discussed in a later section (3).

# 2.1. Method proposed for development of the simulated articles

Each partner decided upon the appropriate theme and relevant contents for the simulated **newspaper article** and provided to Symlog the information required to draft such an article. In particular, policy assumptions from interviews were gathered (and reported in **D4.1**). Symlog furthermore referred to the Media Analysis (**D4.2**) in order to assure that draft articles were in keeping with the habitual tone and vocabulary, etc. seen in the journalism of each country.

For the newspaper article, Symlog was in direct contact with each partner to collect all relevant information that was to be put into the form of a (simulated) article. This process started as soon as each partner clearly identified the substantive issue for a given citizen group context.

The material was delivered to WP leader Symlog in English, who drafted an English article to be validated or improved and translated to country language by each partner (except U.K. of course). (Note that the Romanian partner provided a practically finished article, which was completed by Symlog.) Finally, Symlog formatted the final article (English and country language versions) into a "newspaper-like" appearance, including handsome titles, photo, etc., and returned it in pdf format for color reproduction.

When drafting these articles, the issues and solutions presented were not highly detailed, so that quotations (in particular) would stimulate STAVE group participants to complete the thought with their own ideas.

The article produced in each case carried a fake - but realistic - newspaper's name and a date posterior to the STAVE group meetings, to show that this was a construction. These precautions were useful as experience has shown that group members sometimes consider this stimulus material to be a real newspaper article. It is presented in a journalistic style and typography, and includes a pertinent photograph.

The article was distributed to STAVE group participants at the first meeting, *after* the administration of the EVOC/CAPA/SIMI set. Symlog informed moderators of

what they might expect: experience shows that some participants will comment directly upon the content, while others will make reference to it indirectly during later discussion. If needed, the STAVE group facilitator could feed in some of the article's content during group discussions.



Some group participants reading a simulated newspaper article.

In annex we present the full set of stimulus materials produced for the French, German, Spanish, Swedish, Romanian and UK teams, including both English and country-language versions of the articles.

Note that the English language article and the country language article may differ somewhat in text, as modifications were brought to certain articles after journalistic formatting. Typically each article was developed through an interplay between work package leader Symlog, and the country research team. For instance, a first draft would be developed by Symlog relying on the policy assumptions and similar materials provided by the country team, but also through some amount of internet research to introduce statistics and facts and, importantly, details of atmosphere (including typical fore- and surnames) that lend to realism. Humour and a wealth of useful "tips" might be introduced. Realistic but false brand identities were invented so that no actual companies would suffer prejudice after the articles were read. The text would then be translated by the recipient team, and adapted to the needs and requirements of the STAVE context by additions both factual and "atmospheric". Still, the draft English version is presented in each case in annex because it may provide insight to future STAVE implementers to notice the transformations that take place as a suitable article is elaborated.

# 2.2. Experience of developing newspaper articles – Country-by-country

Below, the experiences of developing and applying newspaper articles are presented in the moderators' own words. The reader will form some idea of the substantive issues selected for each STAVE implementation.

#### 2.2.1. France

The material for the simulated article started with the elements provided by "HB", our policy partner who initially chose the use of the smart meter (called LINKY in France) as the substantive issue for the PACHELBEL project. These elements were mostly technical and policy oriented, and framed within the larger smart grid issue.

More content was thus gathered from newspaper articles (mostly *Le Monde*, but as well *Libération* and *Le Figaro*, i.e. all "serious" national dailies). As LINKY was in an experimental phase at the time in two French regions, these sources provided detailed content about citizens' attitudes to the smart meter.

In addition, we convened a meeting on June 16, 2011 with HB and JRB, our two policy partners from the French Ministry of Environment, together with "Mr LINKY" himself, BL, from ERDF, the subsidiary of the public utility in charge of France's electricity distribution network and responsible for the LINKY program in France. During the lively discussion (it was the first time an encounter between these stakeholders formally occurred) the various dimensions of the LINKY program were fully covered.

On that basis, a final draft was prepared and circulated to all three policy partners. Feedback was globally positive to find the article quite complete. A suggestion was made to clearly distinguish the experimental phase of installing LINKY in a sample of homes, from the future full territorial deployment phase (which had been recently decided by the French government). A request was made to remove information which had been introduced during the June meeting regarding the instalment cost of LINKY during the experimental phase. This had to remain confidential as a tender had been sent to potential industrial bidders for the full deployment of LINKY across the French territory.

#### **2.2.2. Germany**

Starting out from policy makers' reasoning about triggers of change of consumers' habits and their own tools for inducing shifts in behaviour (e.g. regulations), I determined to produce an article that discusses the opportunities and responsibilities of various actors/organizations to cope with climate change. And since policy makers assumed that a lot of people, even if knowing about the threats of climate change, do not want to change behaviour, I wanted to integrate a paragraph on the gap between awareness and behaviour into the article.

I did not discuss the contents of the article with my policy makers. But they raised some issues about the idea of using a simulated newspaper article as stimulus material. They were a bit afraid that participants would get fooled by using such material:

• RC said he would feel he was being fooled by a fake newspaper article because the author would be camouflaged and we would pretend that it is an editorial team's product. He argued that it would also be possible to present the text without this masquerade, it could be easy-to-read even without a newspaper layout. If nevertheless a simulated newspaper article should be used it would be very important to clearly stress that this is not a real article. GS: "People should not think that they are reading a high-quality article by e.g. Frankfurter Allgemeine Zeitung (a leading German quality newspaper). You must make clear that you are the author and that it is not an article published in a real newspaper."

Consequently this advice was followed in the moderation of the STAVE group.

#### **2.2.3.** Romania

In March 2011 as a result of a project group discussion some preliminary ideas about newspaper article appeared:

- There is a stagnation of the Thermal Rehabilitation Programme (the national incentive program to encourage individuals to re-insulate their apartment dwelling), but taking into consideration the expected increases in home heating prices (due to the increase of the price of gas and planned reduction of the incentives for centralized heating, policy makers expect a "market return for thermal insulation of apartment blocks".
- People who accept to insulate their buildings do it only for economic reasons (decrease the heating bill), and sustainability comes second.
- Despite communication programmes including media advertising there is a deficit of information at the level of the general public related to advantages and drawbacks of wall insulations, and how to back fit the dwelling from the point of view of both technical requirements and national and local regulations.

Based on these a draft of the article "The market return for blocks' thermal insulation - Utility climbers have plenty of orders for thermal insulation" was produced, by me, in Romanian language, and discussed with colleagues from the project group. As a base for the text style I used the articles investigated in the summer of 2010 (D4.1 "media analysis" task intended to monitor the sustainability aspects reflected by Romanian media).

Policy partners agreed the content and the form of the newspaper article. In their opinion enough useful information about the costs, advantages and technical requirements were included in the short text.

An English version of the draft was circulated by e-mail to all project partners. I received some reactions, a majority related with the balance between technical and social content. Work package leader Symlog helped us to obtain an adequate balance by introducing social aspects and the perspective of sustainability and global warming issues. After some interactions the article was finalized and set up

in a quite graphical good form in order to be a credible extract from a local quality newspaper "Curierul".

#### 2.2.4. Spain

For the first STAVE trial with shopkeepers, we aimed to introduce the assumptions of policy makers in the simulated news article. For this we used the data collected from fieldwork observation, from content analysis of the Agenda 21 documents and the City Council of Barcelona and from three interviews with technicians and policy makers.

The City Council of Barcelona had a special interest in applying STAVE with a group of shopkeepers, since there was little information available about their environmental behaviour and attitudes and about the reasons of their low participation in the Agenda 21. Therefore, after extracting the assumptions of policy makers, it was necessary to adapt the text of the news article to the reality of the shopkeepers in Barcelona. This work was carried out jointly between the Spanish and French teams. Thus, for a one week period both research teams were working on various versions of the simulated news article to end with the final document. It attempted to portray points of view of both local shoppers and (principally) shopkeepers themselves regarding the role that these professionals play in neighbourhood life and the encouragement of sustainable behaviour, as well as the barriers they face.

As for the subsequent trials of STAVE 2 & 3, both the population and the substantive issue were distinct. Here, "lay citizens" without a professional similarity were engaged to address the smart meter issue. In STAVE 2, the population was persons with no smart meter at home, whereas STAVE3 participants already had the installation. The French article on LINKY was used as a first basis providing a simulated international report. Then, alongside the researchers, policy makers played a **key** role in developing and adjusting this basis to reflect the specific needs of each group process. The two variations of the article are in annex.

#### 2.2.5. Sweden

Our policymakers can be said to have been only indirectly involved in the process of building up the articles. At meetings attended by the team, and in connection with interviews with the policy makers, ideas about e.g. parking fees at workplaces were discussed. At one public meeting (Värmland Climate Day) ideas about promoting bus travel as "cool" were put forward:

#### Värmland Climate Day 4<sup>th</sup> June 2010

 (...)[P]resentations concerned flooding risks, forestry and insurance, progress in the biogas project (based on sorting of household waste) and bus transport. This latter theme was presented by a young and dynamic representative under the motto "in Karlstad it is easy to live without a car". Considerable focus was on "packaging" and selling the concept of bus travel as cool and attractive. These ideas, together with more general ideas about stimuli for sustainable development from media (among others a series of articles in a main Swedish newspaper on peoples' reactions to climate change information) formed the basis for the article drafted by Symlog and finalized by the Swedish team.

#### 2.2.5 UK

Here, the choice of policy issue for the STAVE intervention was consumers' understanding of product lifetimes, with a specific focus on household kitchen appliances, also known as white goods (e.g. washing machines, fridge, toasters, etc.). This choice was made during consultations between the UK research team and the policy partner based at the Centre of Expertise on Influencing Behaviours, DEFRA. Specifically, the UK policy partner was interested in consumer reasoning and everyday behaviour in relation to the durability expectations, reuse, and second-hand purchase of white goods. The policy partner expressed a specific interest in white goods because of a lack of evidence on consumer practical thinking around these appliances and a lack of clarity as to what might be viable policy options in this area. The UK policy partner welcomed the application of STAVE as an opportunity to explore further the consumer understanding of product lifetimes as well as public preferences for policies that would extend use and reduce waste. It was decided to explore current proxies for making decisions about longevity in product lifetimes (such as price and brand). As well, the STAVE intervention was seen as an opportunity to examine how service histories and warranties may be practical tools to help people understand what may be reasonable expectations for product lifetimes.

Given this focus on consumer choices and behaviours around kitchen appliances, the material for the UK stimulus article for the STAVE1 trial was put together by the UK team from various sources: the consumer magazine *Which?*, the *Ethical Consumer* magazine, the *Green Consumer Guide*, the UK White Goods online forum, and other online sources such as iseappliances.co.uk. The stimulus article then was developed by SYMLOG on this basis and after some editing and adjustment by the UK team was presented to the participants under the guise of an article from a so-called i-*Shopping* magazine. The article included a picture of a modern kitchen with a range of white goods, and a text discussing issues such as purchasing, maintaining and discarding white goods.

# 2.3. Experience of applying newspaper articles in STAVE groups – Country-by-country

#### 2.3.1. France

Participants in the French STAVE groups have in common that they are all equipped with LINKY, the new smart meter currently tested in some French regions. The experimental installation of this equipment into homes was imposed by EDF (the state utility) and not performed on a "volunteer" basis.

The simulated news article was given to participants right after the administration of the EVOC/CAPA/SIMI questionnaire. Participants read it quietly. The article was well understood: there were no questions on vocabulary.

Although moderators specified that it was a simulated article, they were struck by the response: this article was received by group participants like a long-awaited official information source. "It is about time that we be given some information!", "It would have been more useful to have this information at the time LINKY was installed at home!".

The news article was very efficient in stimulating dialogue. It contributed to creating both a good group dynamic and cohesion. The discussion that resulted after reading the article dealt with the following subjects/issues:

- Participants shared their experience about the installation of the smart meter in their home
- They detailed difficulties they encountered during and subsequent to installation
- They raised technical questions on the smart meter
- They shared views about the support provided by EDF during this testing phase
- They shared practices in using it and/or regarding their electricity conservation behaviours.

The simulated article was taken home by participants. The  $1^{st}$  STAVE Diary included a question on the article, asking participants to point out the 3 items that interested them most.

#### 2.3.2. **Germany**

Participants found it easy to read the article and it worked well in triggering reflections on one's own and others' roles and opportunities for contributing to climate protection. The article was a good bridge between the preceding general discussion of sustainable consumption (in the context of EVOC/CAPA/SIMI) and the subsequent oval mapping exercise dealing with individual possibilities of reducing household-related energy use.

Participants characterized the article as multifaceted and said it pointed out clearly that climate protection can only be achieved if all societal actors are actively involved. Just to wait that new technologies (e.g. renewable energies) will solve our problems would not be an appropriate approach. On the other hand, a remark was made that if climate protection is labelled as a task for the whole society, many will take this as excuse to do nothing at all. Thus, policy should set the framework under which citizens, industry, and other actors can play their roles. Some participants had a controversial interaction, arguing over whether market-oriented or regulation-oriented policy would gain the best results in terms of behavioural changes.

Furthermore, the following topics of the article were addressed by comments and interactions:

 Rebound effect: The article drew participants' attention to the fact that replacing old household equipment by new energy efficient appliances can have the effect that people use the latter more intensively, or purchase more devices. This would counteract the intention that energy-saving appliances will lead to decreasing domestic energy consumption. Some participants said this was the first time they had realized the possibility of this behavior, and that regulators should be aware of the rebound effect when implementing financial support for the purchase of energy efficient appliances.

- A lot of little things can be done: Participants found this to be an important reminder of the fact that each individual citizen has more or less possibility to do something for climate protection. They mentioned the internet as a good tool to search for things that can be done easily.
- Rewards for energy-saving behaviour: Participants said this is a very interesting approach and they would have liked to read more about how it could be applied.
- Information about energy savings: The hint that consumers' organizations provide information about energy savings led to remarks that in many everyday situations there is a considerable lack of knowledge on how to behave in an energy efficient way.

#### 2.3.3. Romania

The newspaper article was used as stimulus material in the first session, 11 June 2011 for all three STAVE groups: G1-adults over 35 years old; G2 – young citizens; G3- disadvantaged persons.

All three groups were receptive to stimulus materials with some differences:

- G1 and G2 were very attentive to the article content and they liked the information including technical details;
- G3 (at least the older citizens among the disadvantaged group) members were not so happy to read a page of text although the headline seemed to be interesting for them; perhaps they don't read frequently the newspapers or they have strong pre-judgements about the content of the newspapers. However all read the article and made some connection with the ideas from the article during the session. Generally the stimulus material (both newspaper article and Romanian supplementary material in the form of cartoons) had little impact on them.

The response to the article was in some cases very positive. A participant from G1 said "I didn't read Curierul from yesterday. Good article... very clear ... well documented. May I keep the copy?"

A participants from G2 said "I learn a lot from this, it is a good one..."; another: "I didn't know before about the price of insulation and about the amount of money saved by performing insulation of the wall..."

For all three groups we noted that they were convinced of the veracity of the article, believing -- even despite the posterior date of 25 July 2011 and the

layout created without reference to the actual newspaper's visual format -- that the article was photocopied from the local newspaper "Curierul".

#### 2.3.4. Spain

The simulated news article worked very well in all the STAVE implementations. In each STAVE group, the moderators explained that this was a fictional story, but based on real events. Participants did not experience the feeling of being wilfully fooled.

In STAVE 1 most shopkeeper participants had very little knowledge on the Agenda21 so they relied on the different characters included in the news article to start their reasoning on its meaning and how it may relate to their own shops.

Participants in STAVE1 began to reflect in a quite natural and everyday manner on "sustainable consumption", as shown in this fragment of the discussion started just after reading the news article:

Woman1 - Well, the only thing I thought while reading this is that I have to buy a new DVD player. I will buy the cheapest one for my business. My remote control broke down, so I bought a universal one to replace it [...] That cost me  $50 \in ...$  But it is not working properly either! ...of course now I see that without the remote control even if I buy another to replace the command it does not work ... I have to buy another.

Man1 - Another DVD player?

W1 - Yes.

#### Facilitator - And this is what you have seen here...?

W1 – it was the comment on the "bicycle" or I do not know who mentioned that he always buys new things ... well. Because I prefer to repair than to buy new things new.

M2 - You want to repair the video and not have to buy another.

W1 - Yeah, but the labour of a technician is expensive, I know from experience. I had to lay off my technician because people do not repair their phones any longer.... I've noticed that when they damaged the phone, customers change operator or redeem points. No repair. It is not repaired.

M2- Yes, it's true. Today very little is repaired.... If something is spoiled and you need somebody coming to your place to repair it will cost you 30, 40, 50 Euros, and they will just tell you it is broken!!... In the end, you just buy a new one.

M1 - It's all designed to ...

M2 - ... to consume, to throw away and consume, throw away again and consume.

W1 - Some time ago, the mobile phones lasted much longer.

M1 – Everything lasted much longer!

In both STAVE 2 and 3, the simulated news article worked well as a stimulus material in the group dynamics. The participants discussed the Barcelona Energy Agency proposals (as included in the new Energy Plan) presented in the article in a very natural way (basically, without the intervention of the moderator). However, in STAVE 3, the article did not generate a significant discussion on the potential strategies by the local government as participants at this stage were strongly focused on the smart meters – as the smart meters had already been installed in their houses just before the start of the STAVE process. Thus, the effect of this installation dominated all the discussion.

#### 2.3.5. Sweden

All three Swedish STAVE groups were mixed according to similar criteria of achieving a broad range of demographics and experiences. Responses to the press article were quite similar in the three groups: the articles were read with concentration and gave rise to discussion directly. Participants had different views regarding the issues described in the article, so this provided a good start in "breaking the ice" for discussions. The article also worked well as a start for moving on to the oval mapping exercise (and other discussions.

A particularly useful aspect of the stimulus article was that it discussed very concrete measures (fees for parking at work, making bus travel more attractive) while also raising more general issues about e.g. Swedes as being receptive to climate adaptation measures (true or false?) thus stimulating discussion and thoughts at different levels in the groups.

#### 2.3.6. UK

The stimulus newspaper article was used in the STAVE1 group, in the first session. The discussion of the article followed the warm-up discussion of shopping decisions around white goods. The participants were encouraged to think about how the article reflected their experience of white goods, e.g. "is there anything that you do yourself that you think extends or shortens the lifetime of white goods? Please give us an example". In the first session of STAVE 1, we found that after reading the stimulus material the participants did not link the white goods specifically to the environment. The participants found few things to say specifically in relation to the article, and did not reflect explicitly on the environmental impact of white goods. In line with the general discussion, the participants focused on the practical aspects of white goods: I like the idea of the trade-off before your appliance has actually fallen apart; that way you might get a reduction of 50 guid or something off the next item you purchase, than rather wait until it's fallen apart and you have to drop it in the dump and still pay the extra 50 for something else (female, 55). Other participants recognised that they, as consumers, are environmentally unfriendly and expressed little guilt at this: It is a throwaway society though, isn't it. I'm quite shallow in that if I was to change the colour scheme of my kitchen I'd think nothing about getting a new toaster and a kettle to match and getting rid of the old ones (female, 39).

Given the limited impact of the stimulus article on the participants' discourses of sustainable consumption in the first session of STAVE 1, we decided to bring up the article again in session 2. We manually highlighted in colour the specific passages which explicitly addressed the environmental impact of white goods, and asked the participants to read the article again paying attention to those passages. Similarly to session 1, there was little reflection on the issue of sustainability. Instead, the participants focused on issues such as value for money and everyday practicalities: I think, if I could replace it, I'll replace it. I call it an upgrade. So if I can upgrade, I'm always looking to get one better (male, 27). But if you've got an integral kitchen, you wouldn't want to be replacing certain items too regularly because it's quite difficult (female, 55). If the repair was more than £100, I'd be buying a new machine (female, 64).

It could be said that the stimulus article did not necessarily work in the 'direction' desired by the researchers, but was somewhat used by the participants to justify their existing consumption patterns or to argue that there is little they can do, as consumers, to limit the environmental impact of white goods. However, this is not to say that the article did not 'work' – its impact may be a function of the sample

of lay citizens with whom it is used. At the same time, we are aware of the impact that imagery can have on people's understanding and affective reactions, so it is possible that different imagery (e.g. fridges rusting in a dump site instead of a shiny new kitchen) could have stimulated different discourses around white goods.

The same simulated article was used as the first substantive exercise in the STAVE2 and STAVE3 trials. We made no attempt to communicate to the participants that this article was a simulation. We described it as 'something we found on the web'.

This seemed consistent with our attempt to generate a naturalistic conversation. We felt that the participants would not take a simulated article seriously, and presenting it as such would create a sense of artifice rather than naturalism about the associated conversations.

The STAVE2 group was recruited from ABC1 socio-economics categories, and the STAVE3 group from C2DE. Despite clear differences in disposable income, there were not major demonstrable differences in terms of educational levels between the groups, and neither set of participants displayed disciplined reading skills. Neither group seemed to find the article very interesting, and we were a little disappointed (and surprised) that this exercise did not perform more satisfactorily in terms of stimulating conversation. We had to work quite hard at highlighting portions of text for discussion. On balance, it worked better with the C2DE people, serving to elicit some themes to which the group subsequently returned.

# 2.4. Overall assessment and guidance on the use of simulated newspaper articles in the STAVE context

On the basis of the experience collected above, we reflect here on the general lessons learned about applying simulated newspaper articles in the context of the citizens' groups organized by PACHELBEL to discuss issues of sustainable consumption. We consider how this precise stimulus material "worked" as part of the STAVE dynamic, and report any adjustments or changes that could guide future applications.

#### 2.4.1. Positive benefits of using the simulated newspaper article:

Several moderators pointed out that the information provided in the simulated article was eagerly received by group participants. In France, householders felt they had never got needed information when their smart meter had been installed, and found the information in the article. Romanian participants stated they learned a lot from the article on energy savings related to insulation and some kept it as a handy reference (possibly to help guide a future decision about installing such insulation). It was interesting to observe in these cases that the recipients were convinced, despite clear evidence to the contrary (posterior date...), that the article was "real" (provided intentionally by the utility or published the preceding week in the local paper).

In Spain, the article helped STAVE1 shopkeepers "come up to speed" regarding the characteristics of the A21 agreements – without having to ask questions that embarrassingly might have shown them to be ignorant. They seemed to identify with characters quoted in the article, who stimulated personal examples they wanted to introduce in the discussion. Even in the UK where moderators were

disappointed to see that few direct links were made by readers between directives for managing domestic white goods and environmental impacts, the reported discussions showed that the article helped people plunge directly into everyday behavioural examples relevant to the topic. As such the article may have functioned as a good warm-up, as mentioned in e.g. Sweden: "Participants had different views regarding the issues described in the article, so this provided a good start in breaking the ice for discussions."

Further dimensions of this stimulating role are analyzed:

**France**: Using the simulated article had a positive impact in the STAVE process:

- It stimulated discussions a lot.
- Participants identified themselves with parts of the articles, making it easier for them to speak up and dare to share their points of view.
- Coming after the SIMI glossary, it contributed to continued building of a common vocabulary among the group participants, thus facilitating the discussion and mutual understanding.

The advantage of constructing a simulated article is that it is possible to reflect in a single short, readable document most of the issues raised by the theme (here: general presentation of the smart meter, pros and cons) and to provide material that is understandable by a broad public (no jargon).

The simulated news article was constructed along the lines of a debate (with expression of a variety of positions). In this way the article was by no means "propaganda". This is very important and contributes to building confidence between moderators and group participants, showing straight away that moderators are impartial. (This is perhaps a specific cultural need: in France, people are known to be quite distrustful when it comes to authority or top-down policy.)

**Germany**: The simulated news article was about the responsibilities of various stakeholders for achieving progress in climate protection. It worked well in triggering reflections on one's own role and opportunities for contributing to climate protection. The article was a good bridge between the general discussion of sustainable consumption and the succeeding oval mapping exercise on individual possibilities of reducing household-related energy use.

Similarly, in **Sweden and in Spain**: the article also worked well as a start for moving on to the oval mapping and other discussions.

# 2.4.2. Potentially negative aspects of using the simulated newspaper article (and suggestions for alleviating these):

As pointed out in **Germany**, there might be a need to take care that participants do not feel they are being wilfully "fooled" by a false article. However, the positive response to the article in **Spain**, where its fictional character was accepted, or moreover in **France and in Romania**, where people insisted on believing that the article was not false, suggests that "fear of fooling" may not be a grave issue. More importantly, this reception of the simulated article demonstrates that when the stimulus material is developed, it must be done with the highest precision in facts and ethical standard, so as not to abuse the confidence that participants invest in the conveners of STAVE. As pointed out

above, including various opposed points of view in the document (rather than privileging strictly a sole point of view) can help justify such confidence.

**UK:** We reflect on the use of the newspaper stimulus article with respect to two aspects: a) ability to simulate discussion during the group processes; and b) ability to generate material for feedback to policy makers. In relation to the first aspect, in the UK STAVE1 group, we found that the newspaper article did not stimulate discussion around sustainability *per se*, possibly because this topic was not explicitly stated in the material. However, it did stimulate some discussion around practicalities of purchasing, fitting, and disposing of white goods, as well as discussion about how energy efficiency could be measured and made concrete to consumers. In terms of quick and immediate feedback to policy makers, we found that the newspaper article did not generate materials that could be easily reported to the policy makers. Thus, relative to the purpose of STAVE which is to engage the policy partners at all stages of the research process, the newspaper article may be of limited use

On the basis of this experience, we conclude that the effort needed to generate the simulated article was not justified. Articles and other materials that could be found conveniently on the internet were just as effective as stimulus devices.

#### 2.4.3. Issues and questions to consider for future practice:

The newspaper articles were simulated on the basis of topical information and behavioural assumptions provided by each research team usually in liaison with their policy partners. Care was taken to include all aspects signalled. However sometimes that construction may not have been sufficient to stimulate the expected response, as in the UK where no precise link was established by readers between white goods and sustainability or environmental protection. This suggests that a further round of consultation regarding expectations and goals could be useful between those who write the stimulus material and those who plan to use it. Some other testing of the article by a third party reader could also be valuable if there is any doubt about its potential effects. In the process of development in other countries it was seen explicitly that the iterative collaboration between the work package leader or "consultant" for article writing and the researchers and policy makers who knew the context, led to some notable changes and improvements in drafts (Romania, Spain).

Overall most teams found that "the simulated news article does a good job" and moreover, for most groups it was a friendly, accessible way of transferring information – more attractive than presenting an official document. A possibility thus for the STAVE toolbox could be to design a set of instructions for the Public Information people within the policy making institutions on how to build them.

In Sweden the moderators pointed out that the newspaper article has the positive quality of containing both concrete and conceptual aspects of the topic at hand, and this helps to stimulate thought and group discussion on various levels. This mixture of content should be part of the "instructions" for developing future articles.

"We see no great problem in producing faked articles with the right focus, for example using information departments / corresponding competencies that policymakers have access to. Our policymaker FH spontaneously had ideas himself about a faked article. As reported in our notes: FH has commissioned a journalist to examine media articles etc from the 1970 period with the idea that

this kind of material could stimulate discussion about current ideas and measures. FH suggests that this material could very well be adapted in the form of the faked article used in STAVE, as a stimulus for discussions."

Existing material is of course simpler to collect, but may be less accessible, less targeted, and require more time for reflection – one advantage of the simulated articles is the possibility to include a number of pertinent perspectives in a short space, and to make it easy to read in a short time.

Another option is to provide criteria that would help the policy makers to select among their existing information materials the ones that could play the role of stimulus materials in the citizen groups. This should be part of the STAVE delivery at the close of the PACHELBEL project. Preliminary experience with such selection and application is given in the next section below.

# 3. Other Context-Specific Stimulus Material – Why this stimulus material was used; development, results of application, and guidance

Each PACHELBEL partner was invited to decide as well whether to use *public information materials* already developed by the policy partner organization, *vignettes*, and/or other information materials already available (i.e., "real newspapers") as options to stimulate discussion.

# 3.1. Experience of choosing or developing other stimulus material – Country-by-country

These accounts are given in the words of the PACHELBEL research partners.

#### 3.1.1. France

No other stimulus material was developed for use at the outset of group meetings, or to cover information delivery needs in an attractive manner.

#### **3.1.2. Germany**

The policy questions in the German STAVE groups were related to the issue of whether citizens will accept policy measures aiming at reducing domestic energy use. This focus was a requirement of the policy makers who said that for them acceptance of climate related regulations and programmes would be of the highest interest. It was then up to me to choose a handful of consumer related measures from the Climate Protection Concept 2020+ (CPC 2020+) that would be appropriate for group discussions. I selected four measures in the field of energy efficient buildings and two in the field of electric appliances. Beginning with the extensive, expert oriented descriptions in the CPC2020+, I elaborated easy-to-understand fact sheets for both action fields with the following structure:

- → Preliminary note about the origin of the following policy measures
- → General information about energy efficient buildings respectively electric appliances
- → Brief depictions of the policy measures
- → Assessment of the climate protection impact of the measures

We requested that participants read the sheets (2-page paper handouts) and evaluate the policy measures along 3 questions: What is good/bad about the measure? What questions about the measure would you ask the policy makers? Do you think the measure should be implemented?

These materials are annexed.

#### 3.1.3. Romania

A particularity of the Romanian STAVE process was the use of two types of stimulus materials: newspaper article and cartoons. Cartoons were selected by the project team from cartoons on topics related to environmental issues, and evolution of technology and consumption in order to extend the

discussion from the main interest of apartment wall insulation to more general subjects.

Two sets of cartoons were used:

- The first set of cartoons was used for all groups during session 1 (6 cartoons included in a Powerpoint presentation continuously run for 5 minutes, 5 seconds/slide, in the beginning of the discussion period).
- The second set (24 cartoons) was used only for G1 and G3 during session 3. We didn't use for G3 due to the low impact of the cartoons on this group in the first session (at least as perceived by the project team).

These cartoons are annexed.

#### 3.1.4. Spain

No further stimulus material was chosen.

#### 3.1.5. Sweden

Information material from the County Administrative Board webpage was used – specifically describing the background to the two working groups on consumption and road travel (see appended material). Participants received this material at the closing of the second session as "homework" to read before the third session, and they were told that "this is to give you an idea of how the CAVB is thinking about these issues – next time we meet you will be working on putting together the advice and ideas that this group wishes to forward to the CAVB in their future work".

#### 3.1.6. UK

In the UK, the following stimulus materials were used in addition to the newspaper article:

#### In UK STAVE 1,

#### Session 2:

Extract from a participant's diary that described her maintenance practices around her washing machine.

We explained to the participants that we were interested in the sorts of things that people can do to make their products last longer. We used the extract from the diary of participant to stimulate such discussion, e.g. descaling kettles regularly, using hot empty washes to keep the washing machines clean. The extract was printed anonymously and copies were distributed around the table.

Fictitious description of two Bosch washing machines with different lifetime metrics.

We devised two descriptions for two similar Bosch washing machines, and we asked the participants to read each description and compare the two washing machines with different specifications, BOSCH model A and BOSCH model B. Imagine you are looking for a washing machine to buy and you come across these two models with their respective specifications: which one would you be inclined to buy and why? We included some standard information but also some information about 'expected product lifetime'. This was expressed differently: 2600 washes vs. 15 years, and thus we challenged the participants to reflect on

what the lifetime of a washing machine is and how it can be effectively communicated to consumers.

The 'Built to last?' feature in Which? consumer magazine.

In session 3 we also presented the participants with copies of the article 'Built to last?' from *Which?* magazine. This article discussed whether white goods are increasingly made to be disposable rather than repairable. We allowed the participants 5 minutes to read the article and then we engaged them in a conversation about how one can use white goods for longer, how to use warranties, what lifetime to expect from white goods, which brands make longer-lasting white goods, etc.

#### STAVE2, 3

Exercise - writing an advertisement to sell a refrigerator

In session 2, we asked participants to pair up and write an advertisement to sell off an appliance in good shape but no longer needed at home – and then to get feedback from others in the group as to whether it was convincing.

The exercise template is given in annex.

# 3.2. Experience of applying other stimulus material in STAVE groups – Country-by-country

#### 3.2.1. **Germany**

As the group deliberations showed, the handouts developed for rating policy measures worked well in providing participants with sufficient information to be able to reason about these questions. But whereas the homeowners' group had a very intensive and well-informed discussion about energy efficient buildings, the two tenant groups had some difficulties to talk about these measures by which they do not perceive themselves to be directly affected. Nonetheless also the tenant groups were able to jointly create answers.

In contrast, the interactions about electric appliances instantly were quite lively regardless of group segmentation.

#### 3.2.2. Romania

For G3 cartoons were not an appropriate stimulus material, and like the article were difficult for some of the citizens. However, the stimulus material had a clear role in changing the atmosphere from one of excessive caution, restraint and some fear of dialogue to a more open one, even though the capturing of the ideas was poor (or at least apparently poor).

The sets of cartoons had a great impact on G2 and a good impact on G1.

A special note for the receptivity of G2 for the cartoons: They laughed and commented on the depicted situations in terms of attitudes. For example: "... very nice. I like the image with the man navigating on internet ... Facebook ... escaping from his immediate reality... it is a virtual reality...". Another then added "sometimes each of us close the eyes to the immediate facts that we dislike... maybe we are unable to change something or we are accustomed to the situations..."

#### 3.2.3. Sweden

Some comments indicated that the participants found the material drawn from the county website quite boring: "it was not exactly a great pick-me-up". Another comment was that "they (the CAVB) don't really seem to know so much". But our impression is that the stimulus material worked well in focusing participants on giving advice to the CAVB, a task which they took very seriously.

#### 3.2.4. UK

Again, the use of the additional stimuli is evaluated in terms of ability to generate discussion and material suitable for raw and immediate feedback to policy partners.

In the UK STAVE 1 we found that the diary extract about the maintenance of one participant's washing machine generated a good deal of discussion about how to maintain various white goods including irons. Some participants described how their appliances such as fridges and irons broke down because of poor maintenance on their part. This stimulus enabled the participants to reflect on their everyday practices around white goods. The diaries extracts, in general, provided useful material for quick and immediate feedback to policy partners, who appreciated the insight into 'what people actually say'.

Regarding the Bosch washing machine exercise, this too generated heated discussion among the participants about energy efficiency, product lifetime, and value for money for white goods. The exercise made the participants reflect on what metrics are user-friendly indices of product lifetimes: a number of years or a number of washes. Although it generated an interesting debate, the Bosch exercise produced little by way of materials that could be taken to the policy partners as quick and immediate feedback.

Similarly, the feature 'Built to last?' from the Which? magazine generated an interesting discussion around product lifetimes and maintenance but little material to be taken back to the policy partners.

The resource allocation task, however, was more concrete and enabled the results to be fed back directly to the policy partners in terms of the participants' preferences for the policy options suggested by the policy partners. One suggestion for future STAVE applications could be that the participants brainstorm and suggest policy options themselves instead of rating policy options suggested by the policy makers.

Other tasks lent themselves more easily to quick and immediate feedback to policy partners: the oval mapping exercise, and the *ebay* search task where the participants searched for second-hand white goods on *ebay* themselves and expressed their reasons for why they would or would not purchase the items found. For future STAVE intervention, it could be suggested that *ebay* white goods descriptions should be selected by the facilitators and used as stimulus material in the group process instead of being used as a diary task. This would enable the facilitators to explore in greater details the reasons behind the participants' preferences as well as the *shared* meanings and understandings around purchasing second-hand white goods.

With STAVE2, 3, the oval mapping proved a very useful device for involving participants, capturing their ideas, and as a stimulus resource to which we could refer from time to time. It also provided a cumulative account of the evolving group conversation, and a means to create a sense of continuity throughout the

group process. This group activity is set out and results described in the PACHELBEL Implementation work package deliverable reports (D5.X).

The 'writing an advertisement' exercise, in which participants worked in pairs to produce a short advertisement setting out the features of a refrigerator that they hoped to sell, and then took it in turn to try to 'sell' it to their fellow participants, proved popular and amusing, and generated useful conversation.

# 3.3. Overall assessment and guidance on the use of other stimulus material in the STAVE context

On the basis of the experience collected above, we reflect here on the general lessons learned about applying context-specific stimulus material in the citizens' groups organized by PACHELBEL to discuss issues of sustainable consumption. We consider how this precise stimulus material "worked" as part of the STAVE dynamic, and provide guidance for applying such material in future STAVE interventions.

#### 3.3.1. Positive reports

The resource allocation task developed as an exercise (rather than as stimulus material) was mentioned several times by group moderators in the foregoing as a very fruitful activity. One suggestion for future STAVE applications could be that the participants brain-storm and suggest policy options themselves instead of rating policy options suggested by the policy makers. "Policy options could have been designed by the participants themselves as a group exercise, thus engaging them more into practical thinking."

UK: In the STAVE group 1, we found that all stimulus materials worked well as stimuli for group discussion and as tools for insight into (a) individual practices around the issue at stake (white goods) and (b) the shared meanings around issues of sustainability. The materials were easy to develop and generally helpful.

The tasks that lent themselves more easily to quick and immediate feedback to policy partners were the oval mapping exercise, and an *ebay* search task (as part of the diary sequence between meetings) where the participants searched for second-hand white goods on *ebay* themselves and expressed their reasons for why they would or would not purchase the items found. For future STAVE intervention, it could be suggested that *ebay* white goods descriptions should be selected by the facilitators and used as stimulus material in the group process instead of being used as a diary task. This would enable the facilitators to explore in greater details the reasons behind the participants' preferences as well as the *shared* meanings and understandings around purchasing second-hand white goods.

The UK team found that the ebay search task and the Bosch washing machine descriptions were particularly good at providing insight into practical thinking as well as everyday dilemmas around energy use. "For example, with the ebay search task, we were able to understand practical reasoning processes around purchasing second-hand white goods such as trust in the seller, search for a valid reason behind the sale, practicalities relating location of item, ability to check the item on line against other sellers, etc".

In the UK the team also found that the participants found the warranty task interesting and engaging: they searched at home for their white goods warranties and engaged in discussion about their experience of buying and claiming warranties. "On the basis of the STAVE group 1 experience, we would suggest that any task which would involve participants searching for their existing documents (warranties, contracts, receipts, etc.) is likely to generate discussions anchored into real life, everyday practices."

UK STAVE2,3 suggested that the resource allocation and 'writing an advertisement' exercises were especially fruitful.

It may be useful to add a comment about the diary exercise, in which the participants might be regarded as having produced stimulus materials themselves. In UK STAVE2,3, the diary process did not work very well in terms of generating much material. The UK STAVE1 diaries were more effective in this respect. However, another reason for including the diaries in the original STAVE design was to provide a means to reflexively link the participants' everyday lives to their behaviour in the group conversations. In this second function, the diaries seem to have worked well. There was interesting and, we feel, significant evidence that indicating the diary activity served to sensitise the participants to the practical everyday significance of their group discussions, and to reflect upon these matters in between group meetings. There was much talk along the lines of 'I kept finding myself thinking about fridges and washing machines', and 'I kept noticing advertisements'.

#### 3.3.2. Negative aspects and suggestions to alleviate these

The Swedish team observed that group members found some materials drawn from the policy partner's website to be rather boring, but their serious investment in their STAVE "homework" continued to motivate them. "Our impression is that the stimulus material worked well in focusing participants on giving advice to the CAVB, a task which they took very seriously."

In Sweden it was thus noted that "existing materials can be usefully applied when relevant to the main focus issues, as stimulus for discussions, and can be presented in a comprehensible way. It is useful to test the material on a small group before implementation, also to be flexible to adapting the material according to the situation / particular group."

The UK team reflected that not all stimuli lent themselves to generating concrete materials that could be used for quick and immediate feedback to the policy partners (a primary ambition of the STAVE arrangement). They suggested that a balance needs to be struck between the applicability of these stimuli as tools for generating insight into lay practices and as tools for facilitating feedback for the policy makers – their application should be a function of the policy issues and context in which future STAVE interventions will be applied.

According to the experience of the UK STAVE group 1, both real and fictitious newspaper articles could be used for generating discussion in the group processes. The UK team found that the advantage of the real article, such as the one used from the *Which?* consumer magazine, is that it appeared more likely to be trusted by the participants and thus to be taken seriously<sup>4</sup>.

\_

<sup>&</sup>lt;sup>4</sup> See the contrasting discussion above of the ample trust lodged in the simulated newspaper articles by French and Romanian participants, and the "seriousness" perceived by the

Germany: "In a research context it is not really a big deal to develop a fake article, but I think drawing on existing material would be the better option in terms of resources needed when applying STAVE as policy makers' tool."

#### 3.3.3. Some proposals for further stimulus material

While the French team did not apply "other" stimulus material still some reflections were offered on branching out from the questionnaire set and the simulated newspaper article.

The glossary developed for SIMI could be developed into full fledged stimulus material. The STAVE group focuses on people's everyday practice. Using the glossary or another tool, it could be interesting as well to get, early in the group-based process, some idea of how a priori people grasp the field that will be opened up through the STAVE intervention, how they define the terms, and the knowledge that they bring to bear. A questionnaire set like EVOC/CAPA/SIMI, perhaps preferably constructed around a theme more closely in relationship with the STAVE topic, is one open-ended way of investigating such representations. Several exercises then could be created that allow the participants to compare and contrast their knowledge or mental models with their actual practices, and identify why these may diverge if that is the case.

An exercise that appeals to the imagination, asking people to recount their ideal world of sustainability, could provide rich discussion themes.

The resource allocation exercise, although not labelled as a stimulus material, turned out to be a very good tool to stimulate people's imagination and to create a feeling that they were making a valuable contribution. This sensation of added value was perhaps one factor in the quality of the dialogue resulting after the exercise. This sequence should perhaps come earlier in the group-based process – moving it perhaps from the 3<sup>rd</sup> session to the 2<sup>nd</sup> session, as a means for stimulating new themes for the oval mapping.

The Swedish team wrote: "A number of participants mentioned TV programmes and films that had stimulated various thoughts; this might be something to consider using as group discussion material." (This idea was included in the early discussions about project Pachelbel.)

Swedish and Spanish groups. It appears difficult to generalize about the reception of the simulated articles in terms of cultural bent, but a possible pathway to improving them may lie, as suggested above, in a reinforced iterative process of development among researchers, outsider readers, and of course policy partners.

### 4. Overall Reflections on the Role of Stimulus Materials in the STAVE Group Context

# 4.1. Significant to knowledge brokering: The reflexive dimension

As the Swedish team put it during the Stockholm PACHELBEL meeting, the project and especially the interviews give "stimulus for policymaker self-reflection". The STAVE intervention contributed with "food for thought", in the process of developing effective policies.

Is nourishing "policymaker self-reflection" a primary objective for the "Systematic Tool for Behavioural Assumption Validation and Exploration" promised by the project? Even if it is not, still the PACHELBEL team certainly built, over the course of two years, a practice that invited both policy makers and citizen participants to enter a reflexive (self-reflective) space.

Policy makers responded to this invitation through gradually sharing the issues that concern them professionally: how to foster and facilitate more sustainable behaviour on the level of individual citizens. They opened their territory to PACHELBEL researchers who followed them in some of their policy making activities. They accepted to grant their confidence and to become partners in a process of elaboration from which they hoped to draw some knowledge benefit but which was necessarily mysterious and open-ended as it began. This process would imply for the policy partners, in alternation, both an observer's stance and an active contributor's stance. A similar process was undertaken with the citizens recruited to participate in the STAVE groups. Confidence was granted and territory was opened, in an open-ended endeavour calling by turns for self-observation and externally-focused contributions.

In this way, the greatest unexpected outcome of the PACHELBEL trialling may be identification of the self-reflexive dimension created by the STAVE arrangement. One could argue that this "self-reflective" dimension emerges as a key element in STAVE, although not explicitly defined as such in the original project proposal.

The ability of STAVE to initiate self-reflection may possibly be greater than its ability to facilitate (as targeted) the "identification of policy assumptions". The value and weight of this outcome was pointed out in the overall assessment of EVOC/CAPA/SIMI above in section 1.5, regarding the self-reflection stimulated by those questionnaires. And in Spain, France and perhaps other countries, the "self-reflection" dimension is acknowledged by our policy people as a key contribution.

# 4.2. The unique character and role of stimulus material in creating the reflexive dimension

The stimulus material developed for the STAVE group-based process was not the very first point of contact between the PACHELBEL project and the group participants. However, it arguably was of paramount importance in constructing each group that would work together for 3 encounters of 90 minutes, with long stretches of self-observation and reporting in between.

In this the stimulus material was perhaps fundamentally different from the structured elicitation exercises that would characterize many periods of the STAVE experience. Because time is short in a meeting of 90 minutes, the chosen material should be efficient in eliciting reasoning about everyday practices in the consumption domain discussed. However, even if it were not to meet that efficiency criterion, the stimulus material had to address a fundamental moment in the group experience: inviting participants into that shared, reflexive space.

Clearly the broad range of participants from six European countries could not be invited in the precisely same manner, and clearly these individuals did not respond in a uniform manner to the stimulus materials offered. Still, accounts in this report from moderators (and some quotes from participants) show how successfully the primary, group-building function was carried out by a surprisingly unvaried small set of materials.

These included first the EVOC/CAPA/SIMI questionnaire set. We have analysed in the first section of this report (1.5) the role this rather highly structured yet very open-ended task played in **communicating to participants the modus operandi of a self-reflexive, investigative group**.

# 4.3. Beyond the reflexive dimension: other stimulus contributions

Alongside their function of introducing the reflexive dimension, the questionnaires, with their interplay of participants' own words (EVOC or free associations) and a set list of terms (the SIMI glossary), contributed (with or without discussion) to **founding a common vocabulary in the group**. The questions on one's own capacity to change and to make a difference and the value placed on this capacity (CAPA) went straight to the heart of the STAVE endeavour.

As pointed out at the Stockholm project meeting in Summer 2011, across the group-based process "very interesting tensions emerged between accounts generated by CAPA (aspirations? presentation of self?), and diaries (concrete actions)"; such tensions, echoes of the same lived in everyday life, could be elaborated only to the extent that some material or task made the ideal representation concrete. The gap between thought and action was revealed by the stimulus questionnaires, facilitating awareness of barriers to sustainable consumption.

The simulated newspaper articles presented subsequently in the first STAVE group meeting consolidated the work of providing a shared vocabulary. The fictional characters portrayed in these articles then offered a surface for projection or a basis for identification, taking the first step by 'voicing' their opinions and concerns, and thereby facilitating the second step that had to be taken by the strangers gathered in the room.

To suit this function, as the French team pointed out, "the most important thing is to propose stimulus material that is always multidimensional, accommodating of several positions, never driving participants towards a foregone conclusion. This is a warrant of impartiality. Moreover the material should open the door to considering the full range of actors involved in sustainability, and should avoid any use of jargon."

One consideration pointed out by the Swedish team is the use of humour and when and where this is appropriate, and whether this promotes any particular form of discussion as compared to other kinds of stimuli? "On the other hand, our groups found existing material from the policy partner website rather boring, which did not tend to stimulate discussion. So perhaps a certain degree of provocation can be useful when used judiciously."

Many positive comments were collected from project members about the role and function of the stimulus materials: "The stimulus materials were helpful tools for both creating productive group dynamics and eliciting reasoning about everyday behaviours...". "The stimulus materials were absolutely of help in starting up and promoting discussions – and thus also of help to develop insights into how people think and act in relation to the main issues under study." "Both stimulus materials worked very well, it was a good method to have a common frame to start the discussion on the theme... The stimulus material had a clear role in changing the atmosphere from one of excessive caution, restraint and some fear of dialogue to a more open one, even if the capturing of the ideas was poor (or at least apparently poor)..."

Not only the questionnaire set and the simulated newspaper article were included in the flexible collection of stimulus materiel. Among further materials tested by project moderators in hopes of making the most workable invitation to their citizen collaborators were: fact sheets, public information materials drawn from the policy partner's site, or cartoon drawings: "From the point of view of administration there was a big difference between reading a text and looking at some suggestive images...".

Even some of the exercises developed for the later parts of the STAVE experience were identified by moderators as "stimulus material". Yet these perhaps may be singled out not because they helped the group to get on its feet and build a shared framing in the first moments, but because they delivered a reassuringly rich return on the moderators' efforts to "deliver" stimulating information to the policy partners. As pointed out by the Swedish team:

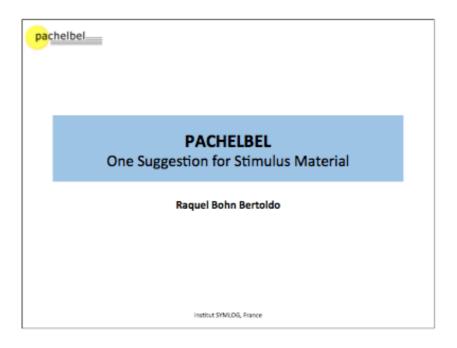
"Policy makers seem to like the resource allocation exercise (perhaps because it places citizens in the difficult position that they themselves experience?). This could be useful in dialogues where the *use of limited resources* is a main focus. It may be that policy makers feel more at home using structured instruments.

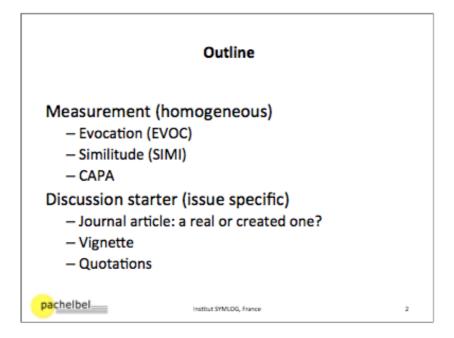
"On the other hand, evidence from the groups indicates that the dynamic of the group discussions contributes to richness and detail. The comparison of what emerges from different instruments will hopefully be one outcome from PACHELBEL to guide adaption of the tool to the purpose."

A comparison of country experiences with various stimulus materials was presented in this Deliverable 4.4 report. Readers are invited to consult the deliverables of PACHELBEL Workpackage 5 (Group-based process) to learn about the comparison of other STAVE aspects.

### 5. ANNEXES

Annex 1: Proposal of the stimulus material by SYMLOG at the March 2011 Consortium meeting in Paris.





### **EVOC**

- This instrument aims at exploring the more consensual and iconographic thoughts people have on an issue. It should be the first stimulus material to avoid interpersonal influence.
- When you think of sustainable consumption, what are the five words/notions that first come to your mind?

1.	
2.	
3.	
4.	
5.	



Institut SYMLOG, France

### SIMI

- Instrument: aims at organizing the ideas about sustainable consumption in a collectively meaningful structure.
- Task: grouping the proposed notions upon their similarity or dissimilarity. The notions used were based on the categories partners made in D4.2; they are supposed to include each partner's <u>substantive issue</u> and to cover the <u>3</u> <u>sustainability pillars</u>.



Institut SYMLOG, France

4

### Simi instrument example

+,- or no mark	Description		
	1. Climate change		
	2. Recycling		
	3. Thermal rehabilitation		
	Energically efficient buildings		
	Clever management		
	Citizen involvement		
	7. Consumers' political power		
	8. Green and local marketing		
	9. Climate protection		
	10. Public transport		
	11. Economical transformation		
	12. Renewable energies		



Institut SYMLOG, France

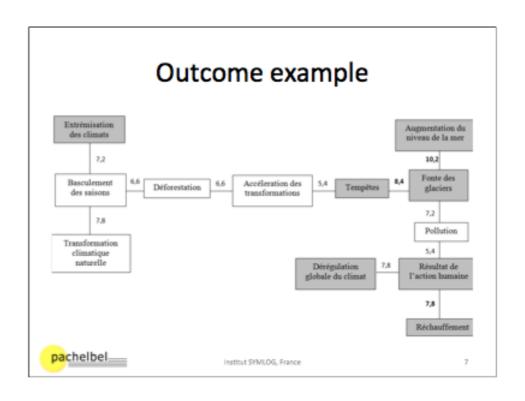
### Categories

- "Representational elements" have been defined in WP4 as "typical images, anecdotes, examples, and references which are used by policy actors to explain and justify policy choices" within the policy domains pertinent to PACHELBEL.
- D4.2: Themes or Representational elements from the media analysis were grouped in six main categories, and are completed by information from field studies:
  - 1. Energy efficiency and clean energy technologies;
  - 2. Social and behavioural change for sustainability;
  - 3. Consumer behaviour and green consumerism;
  - 4. Transportation and car use reduction\*;
  - 5. Climate change;
  - 6. Reusing and recycling;



Institut SYMLOG, France

6



### CAPA tool

- This instrument aims at weighting the importance of the issue in the participant's life and his/her perceived capacity to alter this situation.
- Personal identification, issue importance and perceived capacity to act.
  - Non-sustainable consumption will personally affect me:

    Yes indeed 1 2 3 4 5 6 Not at all

     Compared to other issues, sustainable consumption is an important issue:
    Yes indeed 1 2 3 4 5 6 Not at all

     I can do something to prevent or reduce the effects of non-sustainable consumption:

    Yes indeed 1 2 3 4 5 6 Not at all

## Advantages of homogeneous methods

- · Quick application
- · Enable international comparison
- Before after analysis: estimation of changes directly attributed to STAVE
- · Will serve in groups as a warm up exercise



Institut SYMLOG, France

9

### **Examples of stimulus material**



Institut SYMLOG, France

10

# Noirmoutier séparée par la tempête

La tempête Victor à durement frappé sur l'île de Normoutier, séparée en deux pendant quelques heures quand l'océan a franchi la dune de la Tresson. Premières impressions sur place.

Salise See trimograppe dies éro-tuire, Festige a Franchi la-dene en face de camping exemispal de la Guerraitre, Evante, une Vois la belofie exercity charges regree into par des relates de verse d'ausse à 190 km/h. Che vite un fine tor motel pei a trassed le camping



marsi, if g is the depth such sizes introduce of in plage a bias consideration of the plage of the constant of the same D in core de in place, in the same D is constant or D in the same D in constant or D in the same D in the same D in the same D in the plane D is the same D in the same D in

In mer, or pullpus fearur, that is our los extenses, on fair that if use remain date does devalues assume describes faire lo fear our part of the content. Appellment of the pullpus for the pullpus of the pullpus

on plan phe endros in James a Just 1 tent on distance d'Anchenn.

In temper d'autre de El marine. Le trappe d'autre distance apparent de la moine de la moine plante extent le moid et le suid de di moine reinsolugge aux austies. Tilt de Nobresseriec devient plan puites et d'intéré le plante present de plante d'autre de passer de crisible le moi le dem, donc et tite, nin paut être cette; alon depuis le matin, l'aidiagresse - tion orr di min. Les pelleresses Un passent his objecte que s'on d'affaires déjà à barrer le passage

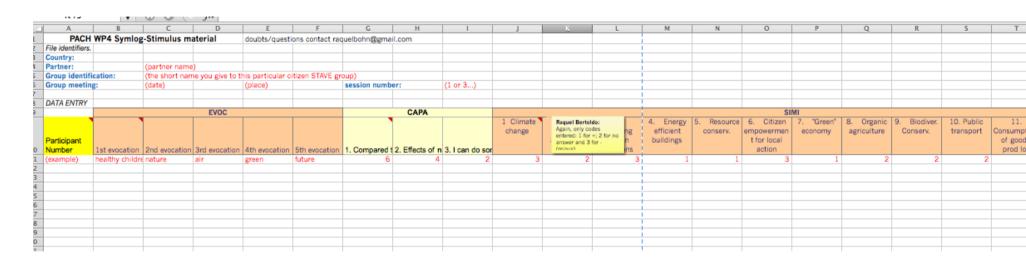
Les nomes des effects de la company de la marie de la company de la comp

Chebillo / 20 avel 2030

200M BUR., Suspile to U. and

### Cristallisation

### Annex 2: Data entry sheet for EVOC/CAPA/SIMI set.



# Annex 3: EVOC/CAPA/SIMI: Detailed results of the Cross-Cultural Analysis

### **EVOC results - cross-cultural findings**

The conjoint (combined data) analyses presented below depict the full set of EVOC data obtained at the first and third meeting of each STAVE group in France, Germany, Romania, Spain and Sweden. (UK data were not collected in the same manner and could not be added to the compilation.) First, a "before-after" comparison of EVOC results highlights differences in "top of mind" ideas according to the time of application. Then, we present a multiple correspondence analysis that allows us to zero in on the specific profile of each country. Interestingly, changes in representations between the two questionnaire applications ("before-after") turn out to be smaller than the general differences found between countries.

#### "Before" findings (first meeting application)

Combined results of the first EVOC questionnaire application (all countries taken together) are found in **iError! No se encuentra el origen de la referencia.** (next page). The top left quadrant summarizes the most "iconic" notions shared across countries about 'sustainable consumption' – we state these are most iconic because they are the most frequently offered and readily available ideas. They are the ideas that most often came to mind and therefore appeared at the top of the paper when people started to fill out the questionnaire – in no matter which country. In this quadrant (shaded grey) we observe that the most widely shared ideas about sustainable consumption are: 'renewable' (named by 43 persons overall), 'conscious consumption' (cited by 35 persons), 'saving' and 'recycling'.

To these most consensual and readily retrieved ideas, we can add those that, despite being shared, are not as readily available. In the top right quadrant of Table 2, ideas such as 'long term', 'local commerce' and 'quality' are identified as part of this second most consensual group.

In the bottom half of the table we see (at left) ideas that were not very often cited, but still appeared at the top of the questionnaire (came quickly to mind for a smaller group of persons). Finally, the bottom right corner shows ideas coming to mind a bit later, for fewer persons. These are the least consensual or least shared ideas associated with "sustainable consumption" when replies by all STAVE participants from the various countries are taken together. Such idiosyncratic ideas may be more related to each participant's individual experiences. Examples are 'wellbeing', 'nature' and 'forests'.

Remember that this table shows the data combined from all countries. We will see later, however, that certain notions appearing here as little shared across Europe, are in fact quite typical when we look at results from a certain country in particular. This is the case with notions such as 'climate change' (commonly found near the top of EVOC questionnaires filled out in Germany) and 'future generations' (shared by groups in France).

		Evocation of	order ≤ 2,9	Evocation order ≥ 2,9		
	Evocation	Freq.	Evoc. Ord	long torm	21	3,095
	renewable	43	2,674	long term local commerce	14	2,929
	cons consumption	35	2,686	environmental protection	14	3,000
	saving	32	2,094	quality	13	3,308
	recycling	32	2,594	reuse	11	3,364
	waste reduction	18	2,611	eco-friendly	11	3,091
	energy saving	16	2,750	efficiency	10	3,100
	environment	13	2,077	fair trade	10	2,900
	equilibrium with nature	13	2,385			
6 < 1	ecology	14	2,214			
	energy	12	2,000			
[2]	resource saving	10	2,800			
_ 5	avoids pollution	9	2,444			
러	organic	9	2,667			
Frequency	resource consumption	9	2,111			
~	awareness	7	2,429	biodiversity	7	3,286
νı	public transports	7	2,714	less industrialization	7	3,571
		6	1,333	nature	7	3,000
2	waste	6	2,500	carbon emissions	6	3,333
힐	cleanliness	5	1,600	future generations	5	4,800
듓	economic bulbs	5	2,400	green	5	3,200
Frequency	conscience	4	2,750	responsibility	5	3,000
	packaging	4	2,250	climate change	4	4,500
				food	4	3,750
				forests	4	4,250
				saving	4	3,750
				wellbeing	4	3,000

Table 2: Evocations before the first group meetings - All countries combined.

#### **EVOC** - "After" findings (application at the third meeting)

Participants filled out the questionnaires anew, at the beginning of the third STAVE meeting. Results of this second application of the EVOC questionnaire (all countries combined) are seen in Table 3.

In the top left quadrant – shaded in grey, where the most consensual and quickly accessed ideas are displayed – we can identify the influence of the group discussions that had taken place in the previous two STAVE meetings. The substantive issue – the major focus on which STAVE discussions centred according to each group context – is reflected by EVOC ideas like the dominant 'energy saving', or 'resource conservation' or 'insulation'. This is an expected result: such notions, frequently discussed during the group process, come readily to mind when walking into the third meeting.

On the other hand, when comparing with Table 2 above (results from the first meeting application), a number of iconic ideas that were found in this upper left quadrant have moved to the top right quadrant, where we can find those consensual ideas that are less easily available. These are ideas that are cited by many persons, but which come to mind afterwards. They appear frequently, but they are placed "farther down in the list" when looking at the questionnaires from all countries combined.

		Evocation o	$rder \le 2.8$	Evocation order ≥ 2,8		
	Evocation	Freq.	Evoc. Ord	recycling	44	3,045
Frequency $\geq 9$	Energy saving saving resource conservation cons consumption insulation public transport efficiency ecology environment energy	40 34 31 26 19 12 12 11 11	2,000 2,059 2,830 2,654 2,368 2,583 2,583 2,182 1,727 2,444	renewables local commerce long term organic environmental protection eco-friendly education consciousness	42 19 17 15 12 11 9	2,976 3,368 3,765 2,800 3,250 3,000 4,000
Frequency ≤ 8		7 5 5 4	2,429 2,600 2,600 2,000	information carbon emissions reuse waste reduction change in habits climate change future generations organization responsibility	7 6 6 6 5 4 4 4 4	3,571 3,833 3,167 3,833 3,800 3,000 3,500 3,250 4,500

Table 3: Evocations at the start of the third group meetings - All countries combined.

Thus, we see a certain shift in mental patterns when comparing "before" and "after" EVOC results. However, the shift in perceptions shown by this tool cannot be taken as evidence for a change in these participants' deep representations of sustainable consumption. Evocation tasks are especially sensitive to preliminary stimulus – they show what is at the "top of the mind", and the shift we observe here is probably the result of the recent discussions participants engaged in with their respective group.

#### **EVOC - Multiple Correspondence Analysis**

The EVOC tool is useful for identifying the most consensual ideas, by identifying the more frequent and readily available notions. The differences between countries are however blurred in the combined analysis presented above, and we are not able to identify which notions are more or less typical in each country. In order to overcome this shortcoming, a factorial analysis (Multiple Correspondence Analysis - MCA) was performed in order to grasp what distinguishes countries.

For this analysis, initially all evocations made across countries were submitted to a rough categorization in order to group the main ideas along consensual lines. Therefore, while 136 different words/notions were evoked in the first session, and 109 in the second, we started the MCA with just 57 different terms.

This analysis seeks to provide a summary of the main variations found in the data. This analysis yielded two principal factors, dimensions or organising principles which can give us insight into variations found within the complete set of categorical data.

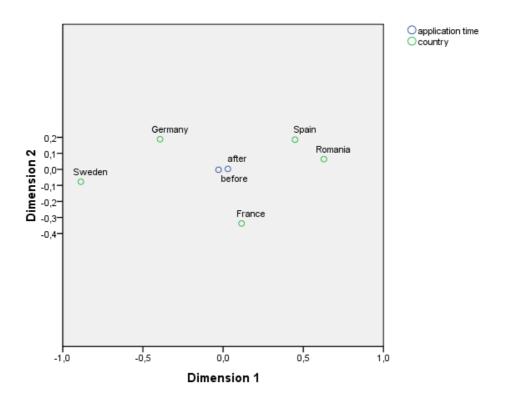


Figure 3bis: Country and application time on the MCA dimensions.

Shown in Figure 3bis as the horizontal axis, the most striking dimension or organizing principle contrasts

- pragmatic elements that are intrinsic to a sustainable way of life, such as 'local commerce', 'quality' and 'reuse', against
- elements that seem to be **higher-level**, and seemingly related to the iconic ideas of sustainability that are often depicted in the media (i.e. ecology, wind power and solar power).

Swedish participants' evocations were particularly related to the pragmatic pole, while Spanish and even more so, Romanian participants' representations are found clustered around the higher-level notions.

The second, less striking dimension or organizing principle contrasts

- concrete ideas related to sustainability, such as 'pollution',
   'consumption' and 'carbon emission', against
- **immaterial ideas**, related to values and attitudes, such as 'respect', 'change in habits', 'consciousness' and 'new thinking'.

German and Spanish responses were more likely to express such concrete ideas, while the immaterial pole correspondents better to the French participants' representations.

These results indicate that, despite a common legal frame and set of goals relating to sustainable consumption, the social and material contexts in which

these sustainability practices take place may be very specific to European member states.

At the centre of Figure 3bis we see the placement of "before" and "after" data. These are close together and hardly contrasted on the dimensions that differentiate the countries so markedly. This shows clearly that the country where the evocations were produced entailed a much higher variation in data than did time of application.

As discussed above, in all countries the second set of evocations was more guided than the first by the notions discussed during the STAVE group proceedings. This could be called an 'availability' effect. The diary activity, in which participants wrote down their own thoughts and behaviours between meetings according to an agreed framework, might also have contributed to this effect. The STAVE group discussion and diary observation in each country centred on a specific set of issues. In this way, the country-specific content is likely also to have contributed to the larger differences seen between countries than between the two time administrations.

### **CAPA results – cross cultural findings**

We observed above for EVOC that the differences between responses "per country" were greater than the detected change between "before" and "after" applications. The same pattern of results was found for the CAPA instrument. We will compare the influence of country and timing on results obtained for each question that was measured by CAPA: the importance attributed to "sustainable consumption", personal identification with this issue, and perceived capacity to act.

#### Importance attributed to "sustainable consumption"

The first CAPA question regarded the importance attributed to the sustainable consumption issue, in relation to the other issues: "Compared to other issues, sustainable consumption is an important issue". Answers were given on a scale from 1 (not at all) to 6 (very much).

The results gathered from all countries (Figure 4) were submitted to a two-way ANOVA. This is a statistical test that lets us gain insight into the relative influence of two variables – here, we looked at timing (before or after) and country (France, Germany, Romania, Spain or Sweden). The analysis did not highlight any significant main effect or interaction. This means that despite small differences, participants in all countries consider sustainable consumption to be an important issue. This judgment did not change as a result of group discussions ("T1 - before" and "T2 - after" ratings were quite similar).

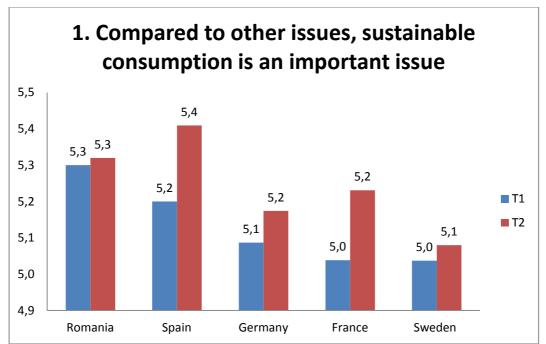


Figure 4: Importance attributed to "sustainable consumption" - comparison across countries.

#### Personal identification

The second CAPA question was related to the personal identification with the issue – here, the perceived personal vulnerability to the effects of non-sustainable consumption: "Effects of *non*-sustainable consumption on the planet will personally affect me". The compiled results (Figure ) showed a significant main effect of country. It showed that Romanian and Spanish participants felt significantly more vulnerable to the effects of *non*-sustainable consumption than did participants in the other countries within our sample.

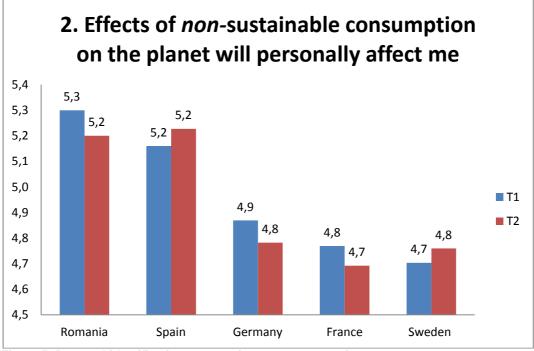


Figure 5: Personal identification - comparison across countries.

<sup>&</sup>lt;sup>5</sup> The statistical significance is: F(4,242) = 2.3, p = .06.

The questionnaire timing "before or after" did not have any significant effect on the personal identification.

#### Perceived capacity to act

The third CAPA question evaluated the capacity participants perceived to have for changing their own sustainable behaviours: "I can do something to increase sustainable consumption".

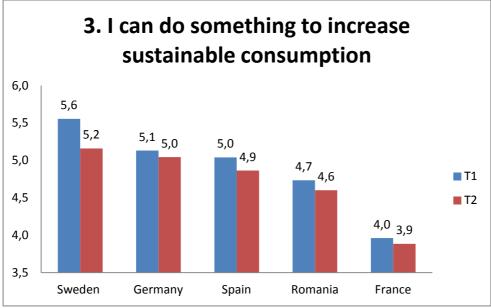


Figure 6: Perceived capacity to act comparison across countries.

The analysis of compiled data yielded a significant<sup>6</sup> main effect of country. That is, Swedish, German and Spanish participants felt significantly more capable of increasing sustainable consumption than French and Romanian participants. The questionnaire timing "before or after" did not have any significant effect on the perceived capacity to act.

Overall, when looking at the three questions, we find greater differences between countries than between "before" and "after" results. This may be because the tool revealed national biases in response, or ways that people from different cultures respond when faced with a scale. It may also indicate that despite the whole group process through which participants in principle became more aware of how they can act in a more sustainable way, this did not change their mean rating of these issues –already high in the beginning of the process.

### SIMI results - cross cultural findings

The SIMI questionnaire asks participants to group together the four notions that "best" correspond to their own idea of sustainable consumption, and the four that "least" correspond. Thus, the overall analysis shows which notions are thought to group together or are excluded. Judging that some notion does *not* correspond to your idea of sustainable consumption is just as informative as judging that some notion *does* correspond. It is therefore interesting to look at the number of times each notion was "pulled in" or "pushed out", and which clusters form between notions (that is, to what degree STAVE group participants pushed or pulled these

<sup>&</sup>lt;sup>6</sup> The statistical significance is: F(4,242) = 8.7, p < .001.

notions in a comparable way) - and their distance in meaning from our central issue, "sustainable consumption". The resulting web of results can be read as presenting a logical rationale of how all sustainable issues might be connected.

Data from all STAVE countries (except the UK) were gathered in a single database and analyzed to look at "before" and "after" results. Figure 7 represents "before" replies for all countries grouped together, and Figure 8 shows "after" replies.

First, some information on how to read these figures. The small numbers on the lines joining the notions indicate which number of participants pushed or pulled in the same direction. After the analysis comparing all the possible connections between two terms, only the strongest pairings remain. Notions are excluded from the web when they have a low "fit" with the other notions – thus, not 'making sense' in the whole.

Analysis of the data gathered in the first group meetings is seen in Figure 7. Inter-item connections lower than 38 were excluded, leaving us with 11% of the total, the most significant and meaningful ones. The element 'green economy' dropped out of analysis as it was not connected with any other item.

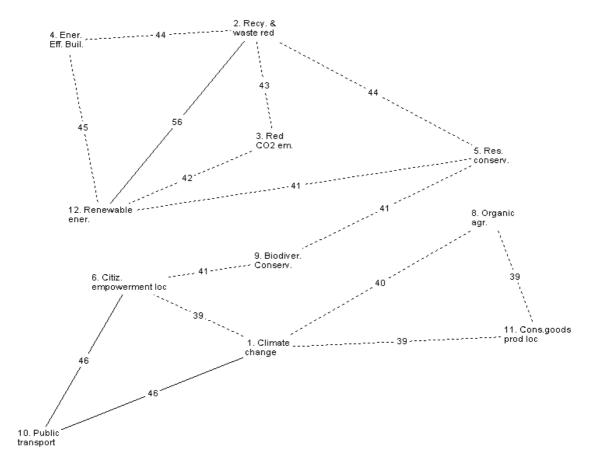


Figure 7: First meeting similitude relations, 5 countries compiled.

This web indicates that, before the group sessions took place, the most central notions (best connected) were 'recycling and waste reduction', 'renewable energies' and 'climate change'. Each of these three notions shows four pathways of strong connections to other elements.

Apart from the 'climate change' idea, these SIMI results largely confirm those found in EVOC. They also show that the ideas people share around sustainable consumption can cluster strongly around a few notions that dominate all the rest.

On the second application of the questionnaire, relations between elements were concentrated between fewer terms, making those dominant notions stand out, and in a more integrated fashion (Figure 8). Inter-item connections lower than 60 were excluded, leaving us with 14% of the total, the most significant and meaningful ones.

Here we can see that the same essential elements from the first meeting (Figure 77) are still very important at the third meeting (Figure 8) – 'recycling and waste reduction', 'renewable energies' and 'climate change'.

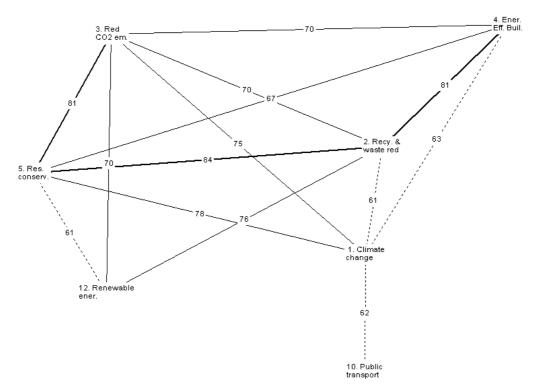


Figure 8: Third meeting similitude relations, 5 countries compiled.

In these "after STAVE" results, we see however the appearance of other 'leading' notions, which may denote the emergence of newer meanings. These new important elements are 'reduction of CO2 emissions' and 'resource conservation', each one connected to other elements by five arrows, and 'energy efficient buildings', connected by 4 arrows. Again, these notions are not distant from the EVOC results. Overall, there is an apparent slight enlargement in focus to more concrete notions at the third meeting.

#### Interpretive ideas include:

- The EVOC and SIMI results overall show that the most widely shared and connected ideas across countries are those related to renewables, conscious consumption, saving and recycling.
- On the second application of the questionnaire, the whole set of participants evoked to a larger extent issues of resource conservation (be it in relation to energy or

insulation issues) and carbon emissions. We interpret that through the process of group discussion and STAVE exercises such as keeping diaries, etc., the representation of sustainable consumption evolved to become more real and concrete.

• This evolution appears in the sample as a whole, while particular samples hold their own specificities.

# Annex 4: Full set of Stimulus Materials used in the STAVE Groups – Country-by-country

and in their language (EVOC/CAPA/SIMI set, simulated newspaper article (also in English), other context-specific stimulus material)

#### **France**

## **EVOC/CAPA/SIMI** questionnaire set

Avant de commencer les discussions, nous vous invitons à répondre aux questions suivantes, le plus spontanément possible. Vos réponses sont anonymes et ne seront pas traitées individuellement. Veuillez répondre à la première question avant de lire les questions suivantes.

#### 1. Questionnaire EVOC

Lorsque vous entendez « <b>consommation durable</b> », quels sont les 5 premiers mots ou expressions qui vous viennent à l'esprit :								
1								
2								
3								
4								
5								
		2	. Questi	onnaire (	CAPA			
Pour les trois votre meilleur 1. Conside consor	choix: érant les <b>mmatio</b> r	autres e	njeux dis	scutés da	ans l'actu	·		
Tout à fait	1	2	3	4	5	6	Pas du tout	
<ol> <li>L'impact de la consommation en général (pas durable) vous préoccupent-ils personnellement:</li> <li>3.</li> </ol>								
Tout à fait	1	2	3	4	5	6	Pas du tout	
4. Vous avez personnellement le sentiment de pouvoir faire quelque chose en faveur de la consommation durable :								
Tout à fait	1	2	3	1	5	6	Dac du tout	

#### 3. Questionnaire SIMI

# Voici 12 notions caractérisant la « Consommation durable» ; veuillez noter dans la colonne de gauche :

« + » En face des 4 notions qui correspondent le mieux à l'idée que vous-vous faites de la consommation durable ;

« - » En face des 4 notions qui correspondent le moins à l'idée que vous vous faites de la consommation durable ;

(4 des 12 notions resteront en blanc, sans "+" ni "-" dans la colonne de gauche )

Pour une brève explication de ces notions, vous pouvez utiliser le glossaire de la page suivante

+, - , ou blanc	Notions
	1. Changement climatique
	2. Recyclage et réduction des déchets
	3. Réduction des émissions de carbone
	4. Bâtiments énergétiquement efficients
	5. Conservation des ressources (eau, minéraux, carburant, électricité)
	6. Renforcer la capacité d'action locale des citoyens
	7. Economie "verte"
	8. Agriculture biologique
	9. Protection de la biodiversité
	10. Transports publics
	11. Consommation des produits locaux et de proximité
	12. Énergies renouvelables (éolien, solaire, géothermie)

Linky est arrivé
Le compteur communicant sera-t-il
un bon pédagogue?

De notre correspondant Etienne Lefébure

oi aussi j'en ai un chez moi, on ne peut pas le confondre avec l'ancien, il est jaune!

 Tu le vois jaune ?! Je trouve plutôt qu'il est vert, un vert anisé ».

Cette discussion entre voisins ne concerne pas un apéritif mais Linky, le nouveau compteur électrique installé sur une fraction du territoire français. Et si sa couleur retient d'abord l'attention, il possède de nombreuses caractéristiques qui nourrissent les discussions.

Déjà, il ne s'agit pas d'une initiative française isolée : la Commission européenne a en effet proposé que 80% des foyers européens aient accès, avant 2020, à des systèmes communicants permettant de varier les tarifs en fonction de la consommation, de faciliter la concurrence et de maîtriser la consommation d'électricité. Et les Etats de l'Union européenne doivent procéder, avant le 3 septembre 2012, à l'évaluation technologique et économique d'un dispositif adapté à cet objectif.

#### PHASE EXPÉRIMENTALE

En France, la phase expérimentale actuellement conduite par Electricité Réseau de Distribution France (ERDF, filiale d'EDF) comprend plus de 250 000 compteurs, installés à Lyon et en Indre et Loire. Au vu du bilan de cette expérimentation, ce sont 35 millions de compteurs électriques qui vont être remplacés sur une période de 6 à 7 ans. Pour ERDF, les avantages offerts par Linky sont clairs: la réalisation à distance et en moins de 24h d'interventions telles que le relevé des compteurs, le changement de puissance, ou la mise en service, simplifieront la vie des clients.

De plus, Linky fournira des informations qui devraient permettre au consommateur de faire des économies. Donc tout serait rose — pardon, vert anisé — au pays de Linky? Pas vraiment, si l'on considère les questions qui soulèvent des controverses.

Le coût du nouveau compteur et de

l'installation d'abord : qui va payer ? Si les avantages du compteur communiquant pour le consommateurs sont annoncés, ils existent aussi pour ERDF : les opérations à distance représentent des gains opérationnels, de même que la réduction des fraudes.

Une rumeur a pourtant circulé un temps, mettant Linky à la charge du client: 230 euros lors de l'installation de Linky, ou sinon le coût du nouveau compteur communicant serait progressivement intégré dans les factures d'électricité. Mais les pouvoirs publics ont coupé court à ces rumeurs et confirmé la gratuité de Linky.

#### MIEUX GÉRER SA CONSOMMATION ?

En revanche, l'incertitude demeure quant à l'équipement en aval du compteur, permettant justement à chacun de mieux gérer sa consommation pour faire des économies. Il est vraisemblable que cet équipement supplémentaire sera à la charge du consommateur. Outre son coût, cet équipement sera-t-il pratique et efficace?

Il serait par exemple nécessaire d'afficher la consommation en Euros, voire en contenu de CO<sub>2</sub>, et non plus seulement en kilowattheures, avec des fonctions de mémorisation et de comparaison, pour aider le consommateur à s'orienter dans ce qui sinon risque de ressembler à une "jungle tarifaire". Vaut-il mieux pour cet affichage un écran spécifique déporté dans une pièce du domicile, des écrans déjà utilisés (télévision, téléphone mobile), ou un accès à sa consommation via Internet?

Un autre niveau de préoccupation concerne les garanties de confidentialité des données recueillies par ERDF. Linky ne devrait pas devenir un "mouchard" ou un "Big-Brother" par trop intrusif dans la vie privée des ménages.

Le pari de base est donc que l'information précise et disponible de façon quasi constante (à terme, la consommation de chaque appareil pourrait être connue) va inciter le consommateur à faire des économies d'énergie: par exemple, en évitant de surchauffer (passer de 22° à 18° permet de vraies économies), éteindre les appareils en veille, choisir les meilleures périodes tarifaires.

Ce sont autant de nudges, ou "coup de pouce", qui permettent à chacun de s'engager dans un comportement actif dans sa vie quotidienne, tout en allant dans le sens de l'intérêt général et le long terme: les économies d'énergie font partie des stratégies de lutte contre le changement climatique et ses conséquences menaçantes. Il s'agit donc de comportements vertueux et d'une situation gagnant-gagnant pour les parties-prenantes.

#### CLARIFIER LES CONTROVERSES

Un Comité Linky, placé sous l'autorité du ministre de l'Intérieur, s'emploie à clarifier les controverses. Mais, passé le moment de curiosité pour cette nouvelle technologie, le consommateur ne risque-t-il pas de reprendre ses habitudes anciennes ? Quels aménagements concrets peuvent contribuer à pérenniser les comportement contribuant à une consommation durable ?

Les compteurs communicants constituent certes une avancée technologique, mais un communicant n'est pas forcément un bon pédagogue: reste maintenant à davantage dialoguer avec les citoyens pour les associer à la définitions des pratiques qu'ils se voient mettre en œuvre dans leur vie quotidienne.

#### English text of French simulated article

#### LINKY IS HERE

Will the smart meter be a good teacher?

- I've got one too at home, no way to confuse it with the old one, it's yellow!
- You see it yellow? I find it to be green myself, absinthe green!

This discussion between neighbors is not about a cocktail but Linky, the new electric meter installed on part of the French territory. And if the color is the first thing that stands out, it has lots of features that make people talk.

First off, it's not just a French thing – the European Commission has proposed that 80% of European homes should be fitted with smart meters by 2020 so as to allow variable rates according to consumption, to foster competition and put the top on consumption of electricity. And before 3 Sept 2012 the European Member states must conduct a technological and economic test of arrangements to meet this goal.

#### **EXPERIMENTAL PHASE**

In France, over 250,000 meters have been installed in Lyon, Indre and Loire within an experimental phase ran by Electricity Distribution Network France (ERDF, a subsidiary of EdF), and it is expected that 35 million meters will have been replaced within a 6 to 7 year period. For ERDF the advantages are clear: at a distance and in less than 24 hours, do such things as read the meter, change power rating, or connect a household – all things to simplify clients' lives.

Moreover, Linky will provide information that should let the consumer save money. So is everything rosy – sorry, absinthe colored- in Linkyville? Not realy, if you look at the controversies.

First off: Who will pay for installation? While consumer advantages are trumpeted, ERDF makes out as well-distance interventions reduce manpower and fraud. Still a rumor circulated that Linky would be put in at the client's expense, 230€ at installation, or else the cost would be progressively paid off over the billing cycle. But the public authorities cut these rumors off at the root and confirmed that the smart meter would be free.

#### BETTER MANAGEMENT OF CONSUMPTION?

ON the other hand, it's still uncertain whether downstream of the meter the equipment will come free to let each client manage consumption to make some savings. It seems that this extra installation will be at client's expense. Besides its cost, will this mechanism be practical and efficient?

For the consumer to find his way through the "rates jungle" not only consumption in kilowatt hours but also in euros and even in CO2 should be readable, with memory and comparison functions. Should this be visible on a special screen brought into the household, on existing TV screens or via smartphone or interpret?

Another worry is about confidentiality. Linky shouldn't be Big Brother intruding into home life. The big idea is that with constant precise information (one of these days the meter should tell you how much each appliance is consuming), the consumer will want to save energy – for instance, by avoiding overheating (going from 22° to 18° really saves money), turning off stand-by appliances, and choosing the best rates periods.

These are all nudges to help people adopt everyday actions that contribute to the collective interest and over time, to the fight against climate change and its menacing consequences. So these are desirable behaviours and a win-win situation for all the stakeholders.

#### **CLARIFYING CONTROVERSIES**

A Linky Committee, under the authority of the minister of the Interior, is trying to clear up the controversies. But once the novelty wears off, won't the consumer go back to his old habits? What arrangements can consolidate sustainable consumption behavior?

Smart meters are certainly a technological advance, but a smarty isn't necessarily a good teacher. What remains to be done is to dialogue more with citizens so that they can contribute directly to decisions about new practices they are to adopt in their everyday life.

#### Germany

## **EVOC/CAPA questionnaire set**

Bevor wir mit der Gruppendiskussion beginnen möchten wir Sie zunächst bitten, die folgenden Fragen so spontan wie möglich zu beantworten. Ihre Antworten sind anonym und werden nicht personenbezogen ausgewertet.

#### Fragebogen No. 1a

Welche fünf Wörter fallen Ihnen zuerst ein, wenn Sie an "Nachhaltigen Konsum" denken?

1	
2	
3	
4	
5	

#### Fragebogen No. 1b

Bitte kreuzen Sie bei den folgenden drei Aussagen jeweils die Zahl an, die am besten Ihrer persönlichen Meinung entspricht:

a) Verglichen mit anderen Themen ist Nachhaltiger Konsum ein wichtiges Thema:

Voll und ganz  1	2	3	4	5	Überhaupt nicht <b>6</b>
0	0	0	0	0	0

b) Die Auswirkungen von **Nicht**-Nachhaltigem Konsum auf den Planeten Erde betreffen mich persönlich:

Voll und ganz  1	2	3	4	5	Überhaupt nicht <b>6</b>
0	0	0	0	0	0

c) Ich kann etwas zur Steigerung des Nachhaltigen Konsums tun:

Voll und ganz <b>1</b>	2	3	4	5	Überhaupt nicht <b>6</b>
0	0	0	0	0	0

# Fragebogen No. 2

In der folgenden Tabelle sind 12 Themen aufgeführt, die mit "NACHHALTIGEM KONSUM" verbunden sind. Bitte markieren Sie mit

"+" 4 Themen, die am besten zu IHREN Vorstellungen von Nachhaltigem Konsum passen;

"-" 4 Themen, die am wenigsten zu IHREN Vorstellungen von Nachhaltigem Konsum passen.

Bitte beachten Sie: Nachdem Sie die "+" und "-"-Zeichen vergeben haben, müssen 4 Themen ohne Markierung übrig bleiben.

"+", "-" oder keine Markierung	Thema	
	1.	Klimawandel
	2.	Recycling und Abfallverringerung
	3.	Verringerung von Kohlendioxid (CO <sub>2</sub> )-Emissionen
	4.	Energieeffiziente Gebäude
	5.	Ressourcenschutz (z.B. Wasser, Rohstoffe, Brennstoffe)
	6.	Lokale und regionale Bürgerbeteiligung
	7.	"Grüne" Wirtschaft
	8.	Ökologische Landwirtschaft
	9.	Artenschutz
	10.	Öffentlicher Verkehr
	11.	Kauf regionaler Produkte
	12.	Erneuerbare Energien (z.B. Wind, Sonne, Geothermie)

#### Wörterbuch zu Fragebogen No. 2

- 1. **KLIMAWANDEL:** Veränderung des Klimas auf der Erde über einen längeren Zeitraum. Wir beziehen uns im Besonderen auf den vom Menschen durch steigende Kohlendioxid (CO<sub>2</sub>-) Emissionen in die Atmosphäre verursachten Klimawandel. Dies führt z.B. zu einem Anstieg der Durchschnittstemperatur und einem steigenden Meeresspiegel.
- 2. **RECYCLING UND ABFALLVERRINGERUNG**: Reduzierung von Haushalts- und Industrieabfällen, die auf Mülldeponien gelagert oder in Müllverbrennungsanlagen verbrannt werden. Recycling bezieht sich auf die Wiederverwertung von Stoffen (z.B. Papier, Metall, Glas, Kunststoff) und die Wiederverwendung von Produkten, die ansonsten als Abfall entsorgt worden wären.
- 3. **VERRINGERUNG VON KOHLENDIOXID (CO<sub>2</sub>-) EMISSIONEN**: Reduzierung der durch die Verbrennung fossiler Brennstoffe z.B. in den Bereichen Mobilität, Industrie, Energieerzeugung oder Heizung verursachten CO<sub>2</sub>-Emissionen.
- 4. **ENERGIEEFFIZIENTE GEBÄUDE**: Dämmung gegen Wärmeverluste von privaten oder öffentlichen Gebäuden zur Verringerung des Heizbedarfs.
- 5. **RESSOURCENSCHUTZ (Z.B. WASSER, ROHSTOFFE, BRENNSTOFFE)**: Verringerung des Verbrauchs nicht erneuerbarer Ressourcen.
- 6. **LOKALE UND REGIONALE BÜRGERBETEILIGUNG**: Verbesserung der Möglichkeit der Beteiligung von Bürgern an lokalen und regionalen Entscheidungen, Schaffung von öffentlichen Diskussionsforen in Städten, Gemeinden und Nachbarschaften.
- 7. "GRÜNE" WIRTSCHAFT: Verbesserung des menschlichen Wohlbefindens und der sozialen Gerechtigkeit bei gleichzeitig erheblich reduzierten Umweltbelastungen.
- 8. ÖKOLOGISCHE LANDWIRTSCHAFT: Art der Landwirtschaft, die auf den Einsatz von Kunstdünger, Pflanzenschutzmitteln, pflanzliche Wachstumsregulatoren (z.B. Hormone), Antibiotika in der Tiermast, Lebensmittelzusatzstoffe und Gentechnik verzicht.
- 9. **ARTENSCHUTZ**: Erhaltung der Artenvielfalt der Pflanzen- und Tierwelt durch Umwelt- und Naturschutz.
- 10. **ÖFFENTLICHER VERKEHR**: Verstärkung der Nutzung öffentlicher Transportmittel zur Verringerung der CO<sub>2</sub>-Emissionen. Zu den öffentlichen Verkehrsmitteln zählen z.B. Busse, Straßenbahnen, U-Bahnen oder Regional- und Fernzüge.
- 11. **KAUF REGIONALER PRODUKTE**: Verstärkung der Nachfrage nach lokalen und regionalen Produkten zur Verringerung von Transportwegen und zur Unterstützung lokaler und regionaler Anbieter.
- 12. **Erneuerbare energien (z.B. Wind, Sonne, Geothermie)**: Art der Energieerzeugung, die unerschöpfliche Ressourcen (z.B. Wind, Sonne, Geothermie) nutzt und nahezu keine CO<sub>2</sub>-Emissionen verursacht.

# DER SÜDFREUND

18 August 2011

# Wer soll es anpacken?

# Zum Klimaschutz können viele einen Beitrag leisten

Von unserem Reporter

Der häusliche Energieveibrauch trägt erheblich zu den CO2-Emissionen bei den Teil der CO<sub>2</sub>-Emissionen verantwortlich. "Konsomenten, die üben käuslichen Emergioserbrauch reduzieren, leisten einen swertvollen Beitrag zum Umsweltschatz – und zie zuerden den Unterschied schnell in ihren Geldbürsen spüren."

#### Wissenschaft und Industrie

Aber von wem sollen die Klima-Herausforderungen durch den häuslichen Energieverbrauch gelöst werden? Kann vom gestressten Bürger erwartet werden, bei jeder Alltagsentscheidung an die Auswirkungen für die Umwelt zu denken? Manche sind der Meinung, dass Wissenschaft und Industrie eine führend Rolle einnehmen müssen. Niemand will Abstriche an der Lebensqualität machen, und Verhaltensänderungen sind nicht einfach. Neue Technologien könnten das Klimaproblem für uns lösen, ist der Gymnasiallehrer M., 56, überzeugt: "In Deutschland gibt es so viel technische Kreativität und Intelligenz, dass die Technologien, die wir im Alltag benutzen, sich bestimmt in die richtige Richtung entwickeln werden. Die meisten Klimaprobleme weden sich durch Erneuerbare Energies, mo-

deme Gebäude und energieeffiziente Produkte und Dienstleistungen lüsen lassen."

#### manage.

Aber wird dieser Fortschritt einfach so stattfinden? Die Politik kann Entwicklungen in der Wireschaft und den Privathaushalten gestalten. Eines der wirksamsten Mittel hierfür sind finanzielle Anreite. Diese können positiv oder negativ sein: Frau H., Mitarbeiterin einer Landesbehörde, entwickelt Modelle, die energiesparendes Verhalten mit attraktiven Prämien belohnen. Gleichzeitig wird an Seeuer- und Preiserhöhungen und neuen Vorschriften kein Weg vorbei gehen. "Wir kalen frigestellt, der Sochinformationen ellein

) Die meisten Klimaprobleme werden sich durch Erneuerbare Energien, moderne Gebäude und energieeffiziente Produkte und Dienstleistungen lösen lassen."



ie Farbe Grün hatte in diesem Frühjahr in Baden-Württemberg eine besondere Bedeutung. Die Pflanzenwelt musste gegen das ungewöhnlich trockene und warme Wetter kämpfen. Und die neue Landesregierung wird von einem Grünen Ministerpräsidenten geführt. Teilweise hat der Regierungswechsel etwas mit der Besorgnis vieler Menschen über eines der drängendsten Probleme unserer Zeit zu tun, dem Klimawandel.

"Ich bin desen überzeugt, dass der Klimawandel eine große Bedrohung für unseren Planeten ist. Schauen Sie nur auf die Weitenkapriolen und malen sich mal aus was passiert, wenn die noch heftiger werden", sagt der Gärtmer E, 40. "Die Menschen haben den Klimawandel gemacht, und nur die Menschen hönnen die Auswirkungen mildern und kontrollieren."

Die deutsche Politik hat bereits einige Anstrengungen unternommen, den Ausstoß des Treibhausgases Kohlendioxid (CO<sub>9</sub>) durch Industrie und Haushalte zu begrenzen. Aus Sicht des Bürgers ist ein Bereich dabei besonders hervorzuheben: der häusliche Energieverbrauch. Laut A., Energieexpertin bei den Stadtwerken einer Großstadt, ist der Energieverbrauch für Heizung, Warmwasser, Beleuchung, Kochen und Elektrogeräte für einen bedeuten-

#### , , Die Politik sollte den Weg vorgeben, die Standards setzen und diejenigen finanziell belohnen, die das Richtige tun"

nicht reichen, um Verhaltensänderungen anzustoβen. Die beste Kombination ist Information + Forderung + Förderung Die Politik sollte den Weg vorgeben, die Standards setzen und diejenigen finanziell belohnen, die das Richtige tim."

#### Verbraucherschutzorganisationen

Bei Verbraucherschutzorganisationen bekommen Bürger Informationen zum Energiesparen. "Wir haben eine wichtige Aufgabe zu erfüllen", sagt der Verbraucherschützer S. "Die Leute erwarten, dass wir ihnen unbürokratisch und kompetent behilflich sind." Eine persönliche Beratung ist besonders nützlich, um nicht in eine verbreitete Falle beim Energiesparen zu tappen, den Rebound-Effekt. "Der tritt zum Beispiel ein, wenn man sich ein energieffizientes Gerät gekauft hat – und dieses dann

länger laufen lässt." Beratung kann auch dabei helfen, das Haushaltsbudget zu durchleuchten. "Die Leute sagen gerne "Ich kann mir nichts Neues leisten", aber durch einige kluge Entscheidungen kann mit dem verfügbaren Geld oft viel gemacht werden", meint der Verbraucherschützer.

kleiner Dinge, die selbst Leute mit wenig Zeit täglich machen können, um Energie und Geld zu sparen."

#### Die Bürger

Was auch immer andere Teile der Gesellschaft tun können, die Bürger spielen die Hauptrolle beim häuslichen Energieverbrauch. "Ich bin sicher,
dass es eine Menge kleiner Dinge gibt, die
selbst Leute mit wenig Zeit täglich machen
können, um Energie und Geld zu sparen.
Und viele können auch Dinge tun, die größere Investitionen erfordern. Ich bin jedenfalls
sehr daran interessiert, über solche Veränderungen nachzudenken", sagt Frau B., 34,
eine Mutter von drei Kindern.

Es ist Zeit für neues Denken und Handeln. Viele Bürger sind besorgt über den Klimawandel, aber ihr Alltagsverhalten ist nicht klimafreundlich. "Wenn sich dieser Widerspruch nicht auflöst, bleiben uns womöglich nur strenge Verbote übrig Stellen Sie sich einen Verboten'-Aufkleber auf vielen vertrauten elektrischen Haushaltsgeräten vor... Wir könnten direkt auf Konsumbeschränkungen zusteuern, wenn wir nicht anfangen, bewußter zu konsumieren", warnt der Zukunftsforscher E. Denken und Handeln, darum geht es beim Klimaschutz.

#### **The Southern Friend**

**August 16, 2011** 

# Who can go about it? Many are able to contribute to climate protection

By our reporter

Springtime brought several shades of green to Baden Württemberg this year. Not only did plants surmount the dry weather and unusual temperatures, but our new government is headed by a Green. At least in part, this choice of leadership is the reflection of our citizens' preoccupation with one of the most pressing issues of our time: climate change.

"For me it's not necessarily a political issue, but I'm convinced that climate change is a great threat to our earth. Just look at the weather patterns and think of what will happen if they become more severe," says gardener F., 40. "Humans brought about climate change, and only humans can lighten and control the impacts now."

Germany has already undertaken ambitious commitments to fight the major culprit in global warming: the emission of greenhouse gases resulting from the energy use of industry and households. While we wait for this comprehensive plan to be enacted, a particular aspect can interest citizens: **domestic energy use**. A., an analyst at an public utility company, points out that energy consumed for **home heating, hot water, lighting, cooking, and appliances** is responsible for a significant portion of CO2 emissions. "Consumers who reduce their energy use will be making a real contribution to protecting our environment – and they will soon measure the difference in their purse, as well".

Domestic energy use is responsible for a significant portion of CO2 emissions

But who can solve the climate challenges of domestic energy use? Should busy consumers have to think about environmental impact for every little decision? For some, *science and industry* should take the lead. No one wants to give up their quality of life, and changing behaviour is hard to do. New technologies should address the climate issue for us. "With all the creativity and expertise in Germany, I'm certain that the technologies we use in everyday life will evolve in the right direction.

Most of the problem will be taken care of just by renewable energy production, better building and energy-efficient products and services that will come onto the market" confides Maurice Henrich, 56, a teacher at a technical lyceum.

Will this improvement happen "naturally"? *Policy* can shape trends, both in industry and at home. One of the strongest levers to be used is financial incentive. This can be positive or negative: Mrs. H.'s ministerial office is considering advantages or statutory provisions that will link energy-saving behaviour to attractive gains. But there will be taxes and price hikes and regulations, too, which drive the point home. "We have noticed that factual information alone is not enough to bring about a shift in behaviour. In fact, the best combination may be information + requirements + support. Public policy should tell stakeholders the best way to go, set standards and reward them financially for doing the right thing."

Consumers' organizations provide people information about energy savings. "We have a big role to play," says consumer activist S. "Citizens count on us to provide advice that is both simple and detailed." Personalized follow-up is useful, too, to avoid a pernicious effect. "Rebound! That's when, for instance, you've proudly bought an energy-efficient appliance — so you use it more lavishly!" Additionally, advice may be needed on adjusting the household budget. "People tend to say 'I can't afford to change' but a few judicious choices can rebalance our resources," according to the consumer activist.

Whatever the role of other stakeholders, *citizens* remain at the center of domestic energy use. "I'm sure that there are lots of little things to be done each day to save energy and money too, that are acceptable even to people with scarce time to spend. And some bigger things as well – calling for a larger investment. But I'm interested to think about these changes," says B., 34, mother of three.

The time has come for thinking, but for action too. Many citizens are committed to climate protection, but their everyday behaviour is not climate friendly. "If this contradiction continues, then the only way out may be more stringent prohibitions. Imagine a 'verboten' sticker on our most typical domestic aids… We could be going straight to 'non-consumption', if we don't take the path toward enlightened consumption" warns futurologist E. Something to think about — and to act upon — indeed.

#### Other context-specific stimulus material

# Politische Maßnahmen zur energetischen Sanierung bestehender Gebäude

<u>Vorbemerkung:</u> Bei den im Folgenden beschriebenen Maßnahmen handelt es sich um Ideen, die von Experten als mögliche Bestandteile einer Klimaschutzpolitik des Landes Baden-Württemberg erarbeitet worden sind. Ob diese Ideen in der beschriebenen Form oder überhaupt verwirklicht werden ist zum jetzigen Zeitpunkt noch völlig offen.

Rund 85 % des Energieverbrauchs der Privathaushalte entfallen auf die Bereiche Raumwärme und Warmwasserbereitung. Der Gebäudebestand nimmt hierbei angesichts der geringen Neubaurate die Schlüsselrolle ein. Dies gilt vor allem für diejenigen Gebäude, die vor 1995 gebaut wurden. Bezogen auf die Gesamtwohnfläche machen diese Gebäude rund 90 % des Gebäudebestandes aus.

Vor diesem Hintergrund strebt die Landesregierung an, den Energieverbrauch von bestehenden Gebäuden stark zu senken. Es ist ihr Ziel, dass alle bestehenden Wohngebäude in den nächsten 40 Jahren energetisch anspruchsvoll saniert werden. Den Anfang sollen dabei Gebäude machen, die vor 1995 errichtet wurden.

Um dieses Ziel zu erreichen, sollen in einem ersten Schritt folgende Maßnahmen für die nächsten 10 Jahre umgesetzt werden:

#### 1) Verschärfung der Anforderungen an die Energieeffizienz bei Sanierungen

Die Energieeinsparverordnung (EnEV) regelt verbindlich, welche energetischen Anforderungen bei der Gebäudesanierung zu erfüllen sind. Derzeit gilt die EnEV 2009, mit der das Ziel verfolgt wird, den Energie-, Heizungs- und Warmwasserbedarf um ca. 30 % zu senken. Durch eine Reform der EnEV soll gesetzlich festgeschrieben werden, dass der Energieverbrauch von sanierten Bestandsgebäuden um weitere ca. 30 % gegenüber dem derzeit gültigen Standard verringert wird. Damit wären in eine Sanierung investierende Gebäudeeigentümer dazu verpflichtet, diese Sanierung so auszuführen, dass der Energieverbrauch des Gebäudes um etwa die Hälfte sinkt (EnEV 2009 + verschärfte EnEV).

#### 2) Mietrecht

Das Mietrecht soll so geändert werden, dass Vermieter nach erfolgter Sanierung einen "energetischen Pauschalzuschlag" auf die Kaltmiete aufschlagen dürfen. Dieser Zuschlag soll "Warmmietneutral" sein, indem er durch die dem Mieter zugute kommende Verbrauchskostenminderung begrenzt wird.

Außerdem ist geplant, dass energiesparende Sanierungen generell vom Mieter geduldet werden müssen, das heißt auch dann, wenn sie nicht gesetzlich vorgeschrieben sind, sondern freiwillig vom Eigentümer durchgeführt werden.

#### 3) Finanzielle Förderung

Eine energetische Gebäudesanierung ist oft mit hohen finanziellen Investitionen verbunden. Um Eigentümern die Entscheidung für eine Sanierung zu erleichtern, sind verschiedene Fördermaßnahmen vorgesehen:

- ightarrow Zinsverbilligter Kredit über bis zu 100 % der Kosten der Sanierungsmaßnahme
- → Nicht rückzahlbarer Zuschuss, der umso höher sein kann, je mehr CO<sub>2</sub> durch die Sanierungsmaßnahme eingespart wird

#### 4) Staatliche Bürgschaften

Für sanierungswillige, aber bedürftige Personen soll ein Programm zur staatlichen Bürgschaftsübernahme aufgelegt werden. Voraussetzung für die Übernahme der Bürgschaft ist der Nachweis der Bedürftigkeit (z.B. Nachweis der Verweigerung eines Bankkredits aufgrund von Alter oder mangelndem Eigenkapital).

#### Was würden die Maßnahmen für den Klimaschutz für einen Zeitraum von 10 Jahren bringen?

Maßnahme	Minderung Raumwärmebedarf	Minderung CO <sub>2</sub> -Emissionen	
	um	um	
Energieeffizienz bei	8,5 %	1,2 Mio. t.	
Sanierungen und Mietrecht			
Förderung und Bürgschaften	28,3 %	4,0 Mio. t	

# Politische Maßnahmen zur Verringerung des Stromverbrauchs von Elektrogeräten

<u>Vorbemerkung:</u> Bei den im Folgenden beschriebenen Maßnahmen handelt es sich um Ideen, die von Experten als mögliche Bestandteile einer Klimaschutzpolitik des Landes Baden-Württemberg erarbeitet worden sind. Ob diese Ideen in der beschriebenen Form oder überhaupt verwirklicht werden ist zum jetzigen Zeitpunkt noch völlig offen.

10 % der CO<sub>2</sub>-Emissionen der Privathaushalte werden durch den Stromverbrauch verursacht. In den Jahren zwischen 1990 und 2007 ist der Stromverbrauch der Privathaushalte in Baden-Württemberg um 23 % gewachsen. Die technologischen Effizienzgewinne elektrischer Geräte werden durch höhere Ausstattungen und längere Betriebszeiten mehr als ausgeglichen.

Vor diesem Hintergrund plant die Landesregierung verbraucherbezogene Maßnahmen, die zu einer Verringerung des Stromverbrauchs in Privathaushalten führen sollen. Hierzu sollen die folgenden beiden Initiativen für die nächsten 10 Jahre umgesetzt werden:

#### 1) Anreize zum Kauf besonders energiesparender Haushaltsgeräte und Energiesparberatung

Um die Anschaffung besonders energiesparender Kühl- und Gefriergeräte, Waschmaschinen, Wäschetrockner, Heizungspumpen etc. zu beschleunigen, erhalten Haushalte beim Kauf solcher Geräte eine finanzielle Förderung in Form einer Geldprämie oder Steuerermäßigung. Voraussetzung für die finanzielle Förderung ist die vorherige Teilnahme an einer Energiesparberatung. Denn viele Verbraucher sind nicht darüber informiert, dass der Austausch von Altgeräten durch energieeffiziente Neugeräte erhebliche Mengen Strom einspart. Die folgenden Bespiele zeigen, wie stark moderne Geräte den Stromverbrauch gegenüber 10 Jahre alten Geräten verringern:

→ Waschmaschine: bis zu 15 %

→ Spülmaschine: bis zu 25 %
→ Kühlschrank: über 50 %

→ Wäschetrockner: über 60 %

Die Energiesparberatung vermittelt zudem Tipps über die vielfältigen Möglichkeiten der Senkung des Stromverbrauchs durch die energieeffiziente Nutzung von Elektrogeräten, zum Beispiel:

- → Fernseher, Computer oder Musikanlagen sollten vollständig abgeschaltet werden, damit sie nicht im Standby-Modus weiter Strom verbrauchen.
- → Durch den Einsatz moderner Waschmittel kann heute auf den Kochwaschgang verzichtet werden
- → Ein Waschgang bei 40 Grad benötigt 50 % weniger Strom als ein 60 Grad-Waschgang.
- → Der Einsatz eines voll beladenen Geschirrspülers ist energieeffizienter als das Spülen von Hand.

#### 2) Verbraucherfreundliche Stromrechnung

Das Land will die in Baden-Württemberg tätigen Energieversorger dafür gewinnen, zukünftig verbraucherfreundliche Stromrechnungen zu verwenden. Diese sollen sich erstens durch eine übersichtlichere Darstellung der Basisinformationen (Verbrauch, Stromkosten etc.) auszeichnen. Zweitens sollen sie durch Zusatzinformationen das Bewusstsein der Verbraucher für ihren Stromverbrauch verbessern. Zu diesen Zusatzinformationen zählen vor allem die

- → Ausweisung der vorjährigen Verbrauchswerte sowie
- → Vergleichswerte vergleichbarer Haushaltstypen.

Durch Stromrechnungen mit solchen leicht nachvollziehbaren Basis- und Zusatzinformationen erhalten die Verbraucher Informationen über die Entwicklung ihres Stromverbrauchs. So wird eine Grundlage geschaffen für Entscheidungen zur Änderung der Geräteausstattung und Gerätenutzung und die Überprüfung von deren Auswirkungen auf den Stromverbrauch.

#### Was würden die Maßnahmen für den Klimaschutz für einen Zeitraum von 10 Jahren bringen?

it do trat dell'ale triajoramien jur dell'immadenate jur emen elettatim ven elettatim en simigent							
Maßnahme	Minderung Stromverbrauch um	Minderung CO <sub>2</sub> -Emissionen					
		um					
Kaufanreize und Beratung	13 %	1,2 Mio. t					
Stromrechnung	5 %	0,46 Mio. t					

## Romania

## **EVOC**

				elul de ma consum			notiuni care	e va vin in
1								
2								
3								
4								
5								
opiniei d	lumneavoa mparatie o	ıstra:			ncercuiti n		corespunde ce	
Da	, cu ranta	1	2	3	4	5	6	Nu, deloc
2. Efect	ele consui	nului ne-su	ıstenabil pro	odus pe glob	ul pamante	sc ma vor a	fecta personal:	
Da	, cu ranta	1	2	3	4	5	6	Nu, deloc
3. Pot f	ace persor	ial ceva ner	ntru a creste	ponderea co	onsumului	sustenabil:		
Da	, cu ranta	1	2	3	4	5	6	Nu, deloc

#### SIMI

In tabelul de mai jos gasiti 12 notiuni aflate in relatie cu "Consumul sustenabil". Va rugam sa marcati cu "+" sau "-", pe prima coloana astfel:

cu '+' 4 notiuni care descriu **cel mai bine** ideile dumneavoastra despre consumul sustenabil;

cu '-' 4 notiuni care descriu **cel mai putin** ideile dumneavoastra despre consumul sustenabil.

Patru din cele 12 notiuni vor ramane nemarcate cu + sau -.

+, -	Descriere
	1. Schimbari climatice
	2. Reciclare si reducerea cantitatilor de deseuri
	3. Reducerea emisiilor de carbon
	4. Eficienta energetica a cladirilor
	5. Conservarea resurselor (apa, minerale, combustibil, electricitate)
	6. Incurajarea participarii cetatenilor in luarea deciziilor si actiuni locale
	7. Economia "verde"
	8. Agricultura organica
	9. Conservarea biodiversitatii
	10. Transportul public
	11. Consumul de bunuri produse local
	12. Energii regenerabile (eoliana, solara, geotermala)

# Piața anvelopărilor termice a blocurilor își revine

Alpiniștii utilitari au foarte multe comenzi pentru izolațiile termice.

#### Adrian Clubotaru

Suntem suficient de conștienți de una dintre moștenirile regimului trecut: blocurile de locuințe, din care o mare parte din energie consumată se risipește afară?

Potrivit experților, în România, 10-15% din costul utilităților este dat de consumul de apă caldă, circa 20% de cel de energie electrică, iar restul vine din consumul de căldură. Vestea că factura la gaze s-ar putea mări din iarna viitoare a generat o adevărată îngrijorare printre proprietarii de apartamente din oraș. Ca urmare, mulți au luat cu asalt firmele de construcții sau pe cele de alpiniști utilitari pentru a realiza reabilitarea termică a imobilelor.

Pentru că în anul 2010 afacerile n-au mers chiar pe roz, patronii firmelor de construcții sunt mulțumiți de revenirea comenzilor și își freacă măinile de bucurie. "E vremea foarte bună și toate comenzile sunt făcute cu o lună înainte. Locatarii au realizat că economiile la facturi sunt foarte mari și s-au hotărât să-și izoleze încă de acum apartamentele. Prețurile sunt negociabile în funcție de suprafață și de grosimea polistirenului. La izolația de 5 cm prețul 
variază între 50 și 55 de lei, la cel de 8 între 55 și 60 de 
lei, iar la cel de 10 între 60-65 de lei pe metrul pătrat", a 
declarat Ionel Tudor, alpinist utilitar.

DOBATILTestele realizate de experții firmei Amvic arata că, în cazul unui apartament cu perete de cărămida de 38 cm, la - 20°C afară, înăuntru sunt 17,4°C. În cazul unui apartament cu perete de cărămida de 38 cm, izolat

cu polistiren de 10 cm, la -20°C afară, înauntru sunt 18,9°C, deci transferul de căldură este mai redus.

"Nu cunose prea multe despre aceste cifre. Tot ce știu este că, după ce am facut anul trecut izolația blocului, este mult mai confortabil în casă, atât iarna, cât și vara", ne-a spus Ioana Ma-

niu (62 ani). "Si fiica mea spune că cheltuielile s-au redus. Costurile cu izolația vor fi recuperate cu siguranță prin economiile la utilități. Iar dacă vom vinde apartamentul vom obtine un pret mai bun..."

Intr-un studiu recent realizat de compania Impact se arată că izolarea termică a unui spartament cu trei camere conduce la o economie de circa 600 euro pe an, dacă ținem cont de efectul înlocuirii tâmplăriei și al izolării pereț ilor cu polistiren de 10 cm grosime. Pe durata de viață a unui apartament construit în clasa energetică A (consum de pănă la 70 kWh/mp/an), valoarea totală a economiilor la factura de întreținere reprezintă aproximativ 25-30%



din valoarea apartamentului.

Tot ce știu este că,

după ce am facut

anul trecut izolația

iarna, cât și vara".

blocului, este mult mai

confortabil în casă, atât

Specialiștii firmelor de anvelopare termică spun că izolațiile cu polistiren expandat cu grosimea de 10 centimetri sunt preferate de către clienții care vor o lucrare bine făcută. "Eu oricum am recomandat întodeauna polistirenul cu grosime de 10 cm, este cea mai bună grosime pentru condițiile noastre climatice", a declarat Răzvan Niță patronul unei companii care operează și în capitală.

Nu toată lumea este însă atât de încrezătoare încât să comande deja lucrarea de izolare termică. Serban Ciupe (34 ani) ne-a spus: "Trebuie să încălzese locuința ... să le fie cald copiilor, dar trebuie să le dau și de măncare! Ce ni se poate spune despre multele situații în care statul nu a

reușit să deconteze banii promiși pentru reabilitarea termică? Nu cred că municipalitatea se poate aștepta ca eu sa rezolv problemele create de cei care au construit blocul în care stau..."

Mariana Filotti, funcționar care înregistrează dosarele de mediu la primărie, recunoaște că unii locuitori sunt

îngrijorați. "Dacă ne uitam la actuala situație economică, este posibil ca sprijinul financiar al statului să nu mai vină, în special dacă ținem cont de faptul că guvernul intenționează ca în perioada 2012- 2014 să reducă la jumătate plafonul garanțiilor de stat care pot fi emise de Ministerul Finanțelor și autoritățile locale, pentru a diminua riscul bugetar".

Procesul de încălzire globală schimbă zi de zi lumea în care trăim. De aceea este nevoie de o protecție mai bună, atăt iarna, cât și vara. Este un efort care merită făcut de fiecare familie, fără a aștepta prea mult ajutorul guvernului.

# The market return for blocks' thermal insulation -Utility climbers have plenty of orders for thermal insulation

Adrian Ciubotaru, 25 July 2011



Do you know one of the legacies of our past regime? Apartment blocks that are big energy wasters. According to experts, in Romania, 10-15% of the cost of utilities is given by hot water, about 20% by electricity and the rest comes from the consumption of heat.

The rumor that next winter the gas bill could increase has generated a real concern among owners of apartments in the city. As a result many people have stormed the specialized construction enterprises or those of utilities climbers, to achieve the thermal rehabilitation of buildings.

Since the last year the businesses have not gone too well, the owners of construction firms are happy and satisfied regarding the return of orders for thermal insulation. "It's a very good weather and all orders are done a month earlier. The inhabitants have realized that the reducing of bills may be important; therefore they have decided to insulate their apartments. Prices are negotiable, depending on the surface and the thickness of the polystyrene. For polystyrene thickness of 5 cm, the price is situated between 50 and 55 lei, for those of 8 cm between 55 and 60 lei and for thickness of 10 the price is between 60 and 65 lei per square meter", said John Tudor, utility climber.

Tests by Amvic experts have demonstrated that for a brick made wall with 38 cm thickness, at an outside temperature around -20° C, inside there are 17.4° C. For an apartment with the

same wall but insulated with polystyrene of 10 cm thickness, at outside temperature of -20  $^{\circ}$  C, there are 18.9  $^{\circ}$  C inside, so heat transfer is reduced.

"I don't know about all those numbers. All I know is, since I had the work done last year, we are much more comfortable in summer as in winter," states Ioana Maniu, 62. "And my daughter says that my bills are balancing out. The work will be paid back over time by my utility savings. When she sells one day, she will get a better price, too."

In a recent study conducted by Impact, it is mentioned that considering the effect of walls insulation with polystyrene of 10 cm thickness and joinery replacing, a saving of about **600 euros per year** will be obtained for a three-room apartment. During the lifetime of an apartment built in energetic class **A** (consuming up to 70 KWh/m²/year), the total savings on bills are about **25-30%** of the apartment value.

The experts of specialized companies said that the customers, who want a good quality of the work, prefer the insulations with expanded polystyrene of 10 cm thickness. "I always have recommended 10 cm, it is more appropriate to our climate conditions", said Razvan Nita, the owner of a firm that operates also in Bucharest.

Not everyone feels confident about ordering this work. Serban Ciupe, 34, says "I have to keep my children warm — but I have to feed them, too! What about those stories that the state failed to reimburse rehabilitations? The municipality can't expect me to solve the problems created by those who built my apartment block!"

Mariana Filotti, who registers environmental dossiers at town hall, acknowledges that some residents are worried. "If we just look at economics, it's possible that no support will come, especially considering that 2012-2014 the government plans to halve the state guarantees limit that may be issued by the Ministry of Finance and local authorities, in order to reduce the budgetary risks. But most of the younger people who come through here have their eye on the larger environmental context." Global warming changes our daily world. Therefore we need a better protection, both in winter and in summer. It is a worthwhile effort made by each family without expecting too much support from government or local authorities.

### Other context-specific stimulus material



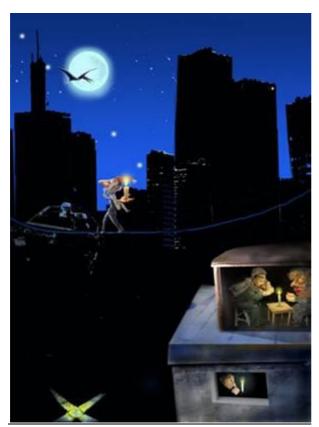
Cartoon 1: change in behaviour- active and passive



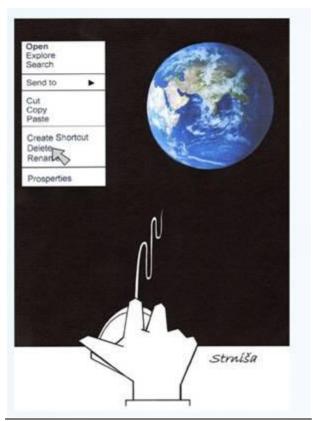
Cartoon 2: change in behaviour- missed opportunity



Cartoon 3: Behaviour and real needs



Cartoon 4: About a possible future...



Cartoon 5: Do we care?



Cartoon 6: Viewpoints...

## **Spain**

## **EVOC/CAPA/SIMI set**

Antes de iniciar las discusiones de grupo, nos gustaría que complete las siguientes preguntas lo más espontáneamente posible. Sus respuestas son anónimas y no serán consideradas de forma individual.

#### **Cuestionario EVOC**

Cuando piensa en	" <b>consumo sostenible</b> ", ¿qué cinco palabras o conceptos l	e
	vienen primero a la cabeza?	

1								
					_			
_					_			
J					_			
			entes afir	maciones,		es <b>total</b>		ión personal <b>le acuerdo</b> y
Cuestionario CAPA  1. En comparación con otras cuestiones, el "consumo sostenible" es una cuestión importante.								
		1	2	3	4	5	6	
	2. <i>Lo</i> s	s efecto.	s del cons		ostenible e nalmente.		neta me	afectan
		1	2	3		5	6	
3	3. Puedo	llevar a	cabo acc	iones para	a que el co	onsumo .	sostenibl	e aumente.
		1	2	3	4	5	6	

#### **Cuestionario SIMI**

A continuación encontrará doce ideas relacionadas con "consumo sostenible".

Por favor, marque con:

- (+) los cuatro conceptos que se corresponden mejor con las ideas que usted tiene sobre el "consumo sostenible".
- (-) los cuatro conceptos que se corresponden peor con sus ideas sobre el "consumo sostenible".

(cuatro de las 12 ideas no quedarán marcadas)

+, -, o deje la casilla en blanco	Descripción			
	13. Cambio climático			
	14. Reciclar y reducir residuos			
	15. Reducir las emisiones de carbono			
	16. Edificios energéticamente eficientes			
	17. Conservar los recursos (agua, minerales, combustibles, electricidad)			
	18. Fomentar la participación ciudadana			
	19. Economía "verde"			
	20. Agricultura ecológica			
	21. Conservar la biodiversidad			
	22. Transporte público			
	23. Consumo de bienes producidos localmente			
	24. Energías renovables (eólica, solar, geotérmica)			

## STAVE 1 (Group of Shopkeepers to be engaged in Agenda 21)

EL SOL Septiembre 2011

BARCELONA AGENDA 21

## La importancia del comercio justo y local

El año pasado la ciudad de Barcelona tuvo un motivo más de orgullo: el Premio Internacional de la Municipalidad y del Programa Hábitat a las mejores prácticas medioambientales concedido por Naciones Unidas. Todo un reconocimiento al esfuerzo realizado en el marco de la Agenda21 de nuestra ciudad. Elaborada por los actores económicos y sociales, la Agenda21 muestra el compromiso por construir un ciudad con mayor calidad de vida y respetuosa con el medio ambiente. Desde 2002, representantes de empresas de todos los sectores y tamaños han participado en reuniones y grupos de trabajo para a intercambiar experiencias que permitan mejorar el medioambiente de

Estas "buenas prácticas" incluyen el por tanto, requieren tiempo y posible-

largas distancias o vinculados a los desplaza- 87% de los mientos de los propios barceloneses empresarios o de sus clientes. Todas estas suelen hacer sitivas la compra en para la ciudad de Barce-lona, pero además lo son para nuestro planeta.

ahorro de agua y energía en las propias mente recursos económicos. También empresas, el fomento del reciclaje y la son precisos cambios por parte de los reducción de residuos, la reducción clientes y muchas veces éstos parede costes de transporte asociados al cen más dispuestos a plantear quejas

comerciante le puede estar ayudando a preservar el medioambiente de la ciudad.

¿Cómo se plasman estas mejores prácticas en la vida cotidiana de los

Sin embargo, existen obstáculos... Las ciudadanos de Barcelona? Según una mejoras medioambientales comportan cambios en el funcionamiento de los barceloneses están especialmente las empresas y de sus empleados y, vinculados a los comercios de su ba- la sostenibilidad ambiental de la ciu-



Los comercios forman parte de la vida cotidiana de la ciudad y por tanto

sean, forman parte de la vida cotidiana de la ciudad, son lugares de inter-cambio y de comunicación, y por tanto, actores esenciales en la Agenda21 de Barcelona: en su día a día ofrecen al ciudadano la posibilidad de promover dad. Para poder observarlo, decidimos dar una vuelta por uno de los barrios de la ciudad siguiendo el "Mapa Verde de Barcelona", en el que figuran las tiendas con comida orgánica y productos locales, locales de comercio justo etc.

Estamos en el barrio de Sants y nos cruzamos con una mujer joven que sale de una tienda del barrio. Como el 87% de los barceloneses, Anna suele hacer la compra en el barrio, donde lo tiene todo siempre a mano. "Forma parte de nuestra manera de vivir, el pescado fresco, la fruta y verdura de tem-porada..., todo lo que necesito lo tengo cerca de casa. Sólo pensar en coger el coche para ir a algun hipermecardo... uf!, ¡vaya cambio de vida!" Esta empresaria de 30 años admite que, además, hay otra razón para ser fiel a los comerciantes de su barrio "me conocen, me gusta hablar con ellos y con mis vecinos..". Anna lleva una bolsa de la compra reciclable: "no más bolsas de plástico" dice riendo, " ¡mi tendero me hizo apartarme de ellas!". Entramos en la tienda de la que aca-

ba de salir Anna. Está muy animada; es muy luminosa y huele estupenda-mente a fruta y verdura fresca. Hay un hombre, grande, con delantal,

#### EL SOL Septiembre 2011

#### BARCELONA AGENDA 21

#### La importancia del comercio justo y local

preguntamos sobre la Agenda21, Joan Ballester, así se llama el dueño, se toca el bigote y afirma "¡Claro que sé qué es la Agenda21! Nuestra asociación de comerciantes nos explicó la importancia de sustituir las bolsas de plástico por otras reciclables. ¿Ecológico? ¡Por supuesto! Yo uso y vendo productos de limpieza verdes. Cuando me dan buenas ideas las aplico. Pero me es casi imposible participar en las reuniones que organizan desde la Agenda 21, puesto que me paso el día en la tienda... ¡estoy aquí de ocho de la mañana a diez de la noche!"

El segundo día de nuestro recorrido por la ciudad nos acercamos al Raval, en concreto a una de las tiendas más punteras en reparación de bicicletas. Carles Nicol, el propietario, reconoce que su clientela está muy concienciada con la problemática medioambiental: "muchas veces son ellos los que me empujan a mí hacia pautas aún más sostenibles. Claro, las obligaciones legales también juegan su papel, pero a mí nadie me ha invitado a participar en la Agenda21... Parece que la ciudad se esté centrando en los que ya son "sensibles" ambientalmente.., que también suelen ser los que más pueden contaminar o dejar de hacerlo. Las reuniones y grupos de trabajo se han organizado para los



dioambientales es más y más compar-tida por los clientes

duos o producen más energía ... Me qustaría que a mí también me dieran esta oportunidad... ¡Yo también puedo hacer cosas importantes!"

Iniciativas. Carles sería un particial igual que otros muchos comercian-

nos concienciadas o preocupadas... Montserrat Pons, de Vallbona, dice que necesitaría que alguna iniciativa como la de la Agenda21 la avudara a poner la sostenibilidad en primera página. "Mis clientes aún prefieren comprar cosas nuevas, aunque haya recambios o repapante muy valioso para la Agenda21, raciones posibles. Está es la actitud que aún domina...; supongo que los clientes tes que trabajan con clientelas me- aún creen que no poder comprar lo últi-

#### Tengo muchas ideas, pero necesito ayuda para ponerlas en práctica "

mo es "de pobres".. Intento convencerles de aue todos estamos en esto; yo soy la primera que "pierde" cuando optan por arrealar o reciclar en vez de comprarpero este es el único modo de preservar v meiorar nuestro entorno. Ya casi nunca enciendo el aire acondicionado, pero he aislado las ventanas y he comprado un toldo a la costurera del barrio. ¿Porqué no tener una "etiqueta verde" en la tienda o cupones de descuento para incentivar las buenas prácticas entre mis clientes...? Tengo muchas ideas, pero necesito ayuda para ponerlas en práctica". No debería el nuevo plan municipal situar al pequeño comercio en el corazón de la Agenda21 de Barcelona? Si desde el Ayuntamiento se organizaran algunos provectos o grupos de trabajo niendo en cuenta sus horarios y limitaciones posiblemente sería posible entender mejor sus preocupaciones y promover "buenas prácticas" razonables para ellos y para sus clientes Marc Garrós

Original English version proposed before amendments were made by researchers and policy makers

#### The Sun

Agenda 21

#### **FAIR AND LOCAL COMMERCE**

Barcelona had one more reason to be proud last year when the United Nations City and Habitat program awarded us their International Prize for Best Environmental Practices. This was recognition for everything that has been done in the context of our city's Agenda 21. Elaborated by the vital partners of economic and social life, the A21 demonstrates the commitment of Barcelona's businesses to building an environmentally friendly city with higher quality of life. Since 2002, representatives of companies of all sizes and sectors have met in round tables to learn and exchange tips and rules for improving the environment.

These best practices range from water and energy savings within company walls, to encouraging recycling and waste reduction, as well as reducing the transport associated with shipping goods from afar or even diminishing individual trips by salespersons or clients. Such acts are good for Barcelona, but good also for our planet.

It hasn't been without problems. Environmental improvements demand changes in employee behavior and company practice, and that can mean temporary disruptions and economic costs. Changes are demanded too from customers, and they are sometimes more apt to complain than to realize that their service provider or commercial partner is helping them to preserve Barcelona's environment.

How are best environmental practices playing out in the daily life of our award-winning Barceloneros? A Chamber of Commerce survey shows that our citizens are particularly attached to their local shops. We decided to cross the barrios using our trusty Barcelona Green Map, pinpointing farmers' and local markets and organic food outlets, shops selling fair trade and eco-products or practicing repair, recycling, re-use and rental share. Shopkeepers of all profiles are important actors in Barcelona's A21, because they offer the chance every day to our residents to rein in the effects of climate change.

In the Sants barrio we cross a pretty young woman coming out of her local grocer's. Like 87% of Barceloneros, Anaïs does her daily shopping within a few dozen meters of home. "It's part of our quality of life – I can get the freshest fish, the best vegetables, all my needs just by strolling down the street. Imagine if I had to take a car, or always frequent one of those huge complexes – it would change life entirely." This office manager aged 30 years admits there is another reason for sticking to small shops: "The shopkeeper knows me, I enjoy talking in line with my neighbors, and I just might find myself filling my basket next to a certain Esteve...". It's true that Anaïs is carrying a fine willow basket. "No more plastic bags for me" she laughs. "My grocer weaned me away from them!"

Let's go inside the shop Anaïs has just left. It's bustling, but we notice it is clean and light, and the perfume of fresh fruit is intoxicating. The big man with the apron must be the owner. Joan Ballester strokes his moustache when we ask about the A21. "Of course I've heard of it. Our shopkeepers' association passed on the message about replacing plastic bags. Clean? Of course! And I use and sell green cleaning products. If someone gives me a set of good ideas, I'll apply them. But I can hardly get away to attend round tables. I'm open from 8 to 22, after all!"

The second day of our tour we hop on our bicycle to visit El Raval and one of its leading-edge little shops: in fact, a bicycle rental and repair shop. Carles Nicol acknowledges that his clientele is environmentally conscious. "I can even say that my own convictions are pushed by my customers'. And legal obligations play a role too. But I notice that I haven't been invited to join A21 activities. It seems that the city focuses first on enterprises identified as 'environmentally sensitive' – those who have the greatest potential to pollute, and thus the

greatest potential to improve! Round tables are attended too by those in power – institutions already important in our energy or waste management systems. I'd like to see more opportunities for my involvement. I can make a difference too".

Carles would be a valuable A21 partner, but so would other shopkeepers whose clientele is less aware. In fact, Monserrat Pons, across town in Vallbona, says she needs something like A21 to bring sustainability ideas to the fore. "My clients often still buy a new appliance when I could offer them a spare part or repair instead. That's an old attitude; I guess customers believe they might be viewed as indigent if they cannot choose something new. But I want them to see we are all together in this — when I help them re-use I lose some money but we improve our dwelling place! I hardly air condition anymore, but I've installed film on my show windows and bought an awning from a local seamstress. How about a green label for my shop, or discount coupons I could hand my clients as an incentive? I have ideas, but frankly, I need help to do this!"

Good news for Monserrat and for the others: the new municipal plan will try to bring private shopkeepers closer to the heart of A21. A wave of roundtables better suited to shopkeepers' constraints, will focus on their needs and the best environmental practices that they can realistically apply and help others to apply. It should make a big difference indeed – because local commerce is closest to the heart of Barceloneros.

Clara Garrós

# STAVE 2 (Group of citizens without smart meters at home)



#### BARCELONA AGENDA 21

# La electricidad inteligente ya está aquí

Si ha oído hablar de las "smarts meters" y le parece que no tienen nada que ver con usted, vaya preparándose... La electricidad inteligente ya está aquí y cambiará radicalmente nuestra relación con algo tan cotidiano como la luz.

hora nos limitamos a encender un interruptor y dar la orden al banco para pagar la factura, pero esto cambiard en lus princimos años", explica Joan Roca, especialista en ciadades inteligentes. Tanto las compañías eléctricas como la Comisión Buropea han cogido carterilla...

La Comisión Europea ha propuesto que el 80% de los hogares europeos tenga contadores inteligentes antes de 2020. En Francia, en la fase experimental que lleva a cabo ERDF (filial de EdF), se han instalado ya más de 250.000 contadores en Lyon, Indre y Loire y se prevé llegar a los 35 millones de contadores inteligentes en un período de 6 a 7 años. En España, Endesa, ha instalado ya medio millón y llegará al millón en diciembre. Iberdrola no se queda atrás: acaba de instalar 90.000 contadores inteligentes y ha adaptado 520 centros de transformación en la primera fase del proyecto que desarrolla en Castellón.

Un estudio del Ayuntamiento de BCN indica que la mayoría de las familias no tiene muy claro si consume mucha o poca electricidad... ni tampoco cómo puede ahorrar energia. Este mismo estudio identifica diferentes tipos de "ciudadano" en función de su implicación con el medioambiente. Así, encontramos a los "concienciados" (un tercio de la población): ciudadanos a los que "les gustaría saber más", "cambiarian fácilmente su estilo de vida para hacerlo más sostenible" y "consumirian menos energía si se les enseñara cómo hacerlo". También hay "cómodos" (un cuarto de la población), personas que no tienen una percepción clara del impacto de sus hábitos sobre el medioambiente y creen que la mayoría de la contaminación se deriva del sector empresarial o industrial.

#### ¿QUE PLANES HAY PARA BCN... ?

En este contexto, el Ayuntamiento de BCN está trabajando en varias iniciativas como los programas de sensibilización y comunicación con el ciudadano, el visualizador de consumo, el asesor energético o la Web comparativa de consumos.

En primer lugar se iniciará una campaña de comunicación continua para sensibilizar a los hogares sobre el uso de la energia y sus efectos medioambientales. Con esta campaña se propone hacer entender a la ciudadanía que es responsabilidad de todos no malgastar los recursos energéticos y utilizar las energias re-



Un contador inteligente es un dispositivo que – en función del uso que se haga de los diferentes aparatos eléctricos – permite conocer en tiempo real la potencia instantánea que se usa en la vivienda, el consumo acumulado de energia eléctrica, su coste en euros y su equivalencia en emisiones de gases de efecto invernadero.

novables cuando esto sea posible.

Por otra parte, el Ayuntamiento va a instalar visualizadores de consumo eléctrico en un conjunto de hogures que permitirán a las familias conocer su consumo, a la vez que facilitará información para conocer el ahorro energético potencial que podría suponer una implantación a gran escala de tales dispositivos.

También está previsto crear o facilitar un Servicio de Asesoramiento Energético personalizado para los hogares, locales de servicios y oficinas. El "asesor personal" se desplazará a las viviendas o locales y realizará aflif un diagnóstico sencillo en el que se detectar el altorro potencial de energía que se puede realizar en dicho hogar. Finalmente, el Ayuntamiento de Barcelona ha propuesto una plataforma web de gestión de datos de consumo energético que permitirá realizar comparaciones entre ciudadanos conectados o grupos sociales virtuales:

La plataforma incluirá un portal de "buenas prácticas", un ranking de los hogares y los comercios más aborradures, y consejos para reducir el consumo energético o las emisiones de CO<sub>2</sub>. El ayuntamiento incentivará la participación ciudadana mediante programas y competiciones, y se potenciará que los niños puedan educar a los adultos, mediante proyectos educativos en las escuelas.

Como se indicaha al principio de la noticia la Unión Europea está apostando por los contadores inteligentes.... ¿serán la solución para ahorrar energia en el hogar?

En otras palabras, los contadores inteligentes son una herramienta, una novedad tecnològica, pero ¿serán también un maestro? Pasada la "novedad" ¿volverá el consumidor a sus antiguos hábitos? ¿Qué medidas podrán ayudar a perpetuar los buenos hábitos contribuyendo al consumo sostemble?. Queda pendiente un diálogo con la ciudadanía para definir las prácticas cotidianas hacia la sostenibilidad.

JADNE LIMA

Newspaper: El Sol February 2012

## "Intelligent Electricity Is Here"

If you have heard about "Smart Meters" but think that they have nothing to do with you, you had better think again... Intelligent electricity is here and will radically change our relationship with such an everyday thing as our mains power. "Now we simply turn on a switch, then give instructions to our bank to pay the bill, but this will be changing over the coming years", says Joan Roca, a specialist in Smart Cities. Both the electric utilities and the European Commission have been gathering momentum...

A Smart Meter is a device that, based on the use of the various electrical appliances in a home, provides real time information on the instant power being used, cumulative electric power consumption, cost in Euros and equivalent greenhouse gas emissions.

The European Commission has proposed that 80% of European homes should be fitted with smart meters by 2020. In France, over 250,000 meters have been installed in Lyon, Indre and Loire within an experimental phase ran by ERDF, a subsidiary of EdF, and it is expected that 35 million smart meters will have been installed within a 6 to 7 year period. In Spain, Endesa has already installed half a million and will reach one million by December. Iberdrola is not idle either: 90,000 smart meters have just been installed and 520 transformer stations have been adapted within the first phase of a project under development in Castellón.

### What plans are in store for BCN...?

A study by Barcelona's City Council states that most households are not very clear on whether they are spending a lot of electricity or not... neither on how they could save energy. The same study identifies different types of "citizens" depending on their environmental involvement. Thus, we come across those who are "conscientious" (one third of the population): citizens that "would like to know more", "would readily change their lifestyle to make it more sustainable" and "would spend less energy if appropriately taught". There are also those who are "laid back" (one quarter of the population); these are people who do not have a clear perception of the impact of their habits on the environment and believe that most pollution derives from the entrepreneurial and industrial sectors.

Within this context, the BCN City Council is working on several initiatives such as Citizen Awareness and Communication Programmes, the Consumption Display, the Energy Consultant and the Consumption Comparison Web.

Initially, a continued information campaign will be launched to raise household awareness on the use of energy and its environmental impact. This campaign is intended to make the population understand that it is everybody's responsibility not to waste energy resources and to use renewable energy whenever possible.

Furthermore, the City Council will install *Electrical Consumption Displays* in a selection of homes that will allow households to know their consumption and will in turn provide information to determine the potential energy savings that a wide-scale implementation of such devices would generate. Plans are also in place to create or provide an individualised *Energy Consulting Service* for homes, shops and offices. The "Personal Consultant" would visit homes and establishments and

perform a simple on-the-spot diagnosis by which the potential energy savings that may be obtained at that home would be determined. Finally, Barcelona's City Council has proposed a **Web Based Platform for Energy Consumption Data Management** that would allow comparisons between logged-in citizens or virtual social groups.

This platform is to include a "Good Practices" portal, a home and commercial establishment highest saver ranking, and advice on how to reduce energy consumption and  $CO_2$  emissions. The City Council will promote public participation through programmes and competitions, and adult education by children will be fostered through school educational programmes.

As mentioned at the beginning, the European Union is counting on smart meters... **but, will they be the solution to save energy at home?** 

In other words, smart meters are a tool, a technological breakthrough, but, will they also become a tutor? Once the "novelty" is over, will the consumer slip back to old habits? What measures may assist the preservation of good habits, thus contributing to sustainable consumption? A debate with the public is due in order to define *daily practices towards sustainability*.

# STAVE 3 (Group of citizens with smart meters at home)



#### BARCELONA AGENDA 21

# La electricidad inteligente ya está aquí

Si ha dido hablar de las "smarts grids" y le parece que no tienen nada que ver con usted, vaya preparándose... La electricidad inteligente ya está aquí y cambiará radicalmente nuestra relación con algo tan cotidiano como la luz.

hora nos limitamos a encender an interruptor y dar la orden ai banco para pagar la factura, pero esto cambiard en los práximos años », explira Joan Roca, especialista en ciudades inteligentes.

Un estudio de la UE (Bio intelligence study) señala que gracias a las "smart grids" (re des intelligentes). Burupa podría aborrar 7.500 millores de euros anuales. "La clave", apunta Rodríguez. Plaza, de IBM, está en que las actuales redes (unidireccionales) se covier um en bidireccionales: lueiscoricidad y los información circulardir en ambos sensidos". Para que esto suoda habrá que cambiar los

acruaies comadons de luz, magnéticos -con cien años de antigüedad- por smarts meters (comadones inteligentes). En España hay unos 23 millones de comadones, y uniendo en cuenta que cuda uno de los nuevos sale por 150 euros, la inversión rotal superará los 3.000 millones.

Tamo las compañías eléctricas como la Comisión Europea han rogido carrerilla... La Comisión Europea ha propuesto que e 180% de los hogares e uropeos tenga contradures inteligences annes de 2020. En Francia, en la fase experimental que lleva a cabo ERDF (filial de Electricidad de Francia), se han instatado ya más de 250.000 conradores en Lyon, Indre y Loire y se prevé liegar a los 35 millones de contadores imeligentes en un período de 6 a 7 años. En España, Endesa, ha insutado ya medio millón y llegará al millón en diciembre, therdrois no se queda arrás: acaba de instalar

90.000 comadons ineligenes y ha adaptado 520 centros de transformación eliferica en la primera fase del proyecto que deserrolla en Cassellón.

#### ¿QUÉ PLANES HAY PARA BON?

En esse consixto, el Ayuntamiento de BCN está trabajando en varias iniciativas como el visualizador de consumo, el asesor energético o la plataforma comparativa de consumos. Según un estudio de l'ayuntamiento la mayoría de las familias de BCN no tiene muy claro si consume mucha o poca electricidad... El Ayuntamiento va a instalar visualizadores de consumo eléctrico en un conjunto de hogans que permitirán a las familias conocer su consumo, a la vez que facilitará información para conocer el aborto energético pouncial que podría suponer una implantación a granescala de tales dispositivos.

Se sale, rambién, que un porcentaje importante de la población de Barcelona no tiene un conocimiento claro de cómo puede aborrar energía. El Ayuntamiento propone

crear o facilitar un Servicio de Asesovamiento Energético personalizado para los hogans, locales de servicios y oficinas. Esse asesor personal se desplazará a las viviendas o locales y malizará alli un diagnóstico sencillo en el que se descuará el ahorro posencial de energía que se puede realizar en dicho hogar.

Además, el Ayuntamiento de Barralona ha propuesto una plataforma web de gestión de datos de consumo energético que permitirá malizar comparativas entre ciudadanos conectados o grupos sociales vártuales. Los hogares que ungan instalado el contador in-

eligene podrán ver su consumo (Kwh/m², Kwh/persona, etc...) y comparatio con el de ouros ciudadanos. Los que no sengan el aparam podrán introducir sus datos de consumo a partir de facturas y anotaciones.

La planaforma We b incluiră un portal de "buenas prácticas", un ranking de los hogaresy los comercios más ahorradores, y consejos para miducir el consumo energético o las emisiones de CO., El ayuntamiento inconstrará la participación riudadana medianne programas y competiciones, y se posenciará que los niños puedan educar a los adulios, medianas proyectos educativos en las escuelas. La Unión Europea essá apostando por los conradons inteligenus... ¿serán la solución a la necesidad de ahorrar

energia en el hogar?

En Francia se ha puesso en marcha un "comiel Linky" para profundizar en essas cuestiones... Linky (el comador inteligense francis) es una herramienta, una novedad secnológica, pero no es un maestro. Pasada la "novedad" (volveri el corestmidor a sus antiguos hibitos? ¿Qué medidas podrían ayudar a perpetuar los buenos hábitos contribuyendo al consumo sossenáble?

Queda pendiense un diélogo con la ciudadania para definir las prácticas cocidianas bacia la sosa nibilidad. James Lima



Un contador inteligente es un dispositivo que — en función del uso que se haga de los diferentes aperatos eléctricospermite conocer en tiempo real la potencia instantánea que se usa en la vivienda, el consumo acumulado de energia eléctrica, su coste en euros y su equivalencia en emissiones de gases de efecto invernadero.

.....

Newspaper: El Sol February 2012

## "Intelligent Electricity Is Here"

If you have heard about "Smart Grids" but think that they have nothing to do with you, you had better think again... Intelligent electricity is here and will radically change our relationship with such an everyday thing as our mains power. "Now we simply turn on a switch, then give instructions to our bank to pay the bill, but this will be changing over the coming years", says Joan Roca, a specialist in Smart Cities.

A study by the EU (the *Bio Intelligence Study*) states that thanks to the "*Smart Grids*" Europe could save annually up to 7,500 million Euros. "The key", points Rodríguez-Plaza from IBM, lies on current (unidirectional) grids being converted into bidirectional grids: both electric power and information will travel in both senses." For this to become a reality, current magnetic, one-hundred year old power meters need to be replaced with *Smart Meters*. In Spain there are about 23 million meters; bearing in mind that each new meter costs 150 Euros, the total investment will exceed 3,000 millions.

A Smart Meter is a device that, based on the use of the various electrical appliances in a home, provides real time information on the instant power being used, cumulative electric power consumption, cost in Euros and equivalent greenhouse gas emissions.

Both the electric utilities and the European Commission have been gathering momentum... The European Commission has proposed that 80% of European homes should be fitted with smart meters by 2020. In France, over 250,000 meters have been installed in Lyon, Indre and Loire within an experimental phase ran by ERDF, a subsidiary of Électricité de France, and it is expected that 35 million smart meters will have been installed within a 6 to 7 year period. In Spain, Endesa has already installed half a million and will reach one million by December. Iberdrola is not idle either: 90,000 smart meters have just been installed and 520 electrical transformer stations have been adapted within the first phase of a project under development in Castellón.

### What plans are in store for BCN...?

Within this context, the BCN City Council is working on several initiatives such as the Consumption Display, the Energy Consultant and the Consumption Comparison Platform.

According to a study by the City Council, most BCN households are not very clear on whether they are spending a lot of electricity or not... The Council will install *Electrical Consumption Displays* in a selection of homes that will allow households to know their consumption and will in turn provide information to determine the potential energy savings that a wide-scale implementation of such devices would generate.

It is also known that a significant percentage of Barcelona's population do not have a clear knowledge of how they could save energy. The Council proposes to create or provide an individualised *Energy Consulting Service* for homes, shops and offices. This personal consultant would visit homes and establishments and perform a simple on-the-spot diagnosis by which the potential energy savings that may be obtained at that home would be determined.

Furthermore, Barcelona's City Council has proposed a **Web Platform for Energy Consumption Data Management** that would allow comparisons between logged-in citizens or virtual social groups. Homes with an installed *Smart Meter* will be able to see what they are consuming (kW·h/m², kW·h/person, etc...) and compare it to what other citizens are doing. Those that do not have the device will be able to enter their consumption data based on their invoices and notes.

The web based platform is to include a "Good Practices" portal, a home and commercial establishment highest saver ranking, and advice on how to reduce energy consumption and  $CO_2$  emissions. The City Council will promote public participation through programmes and competitions, and adult education by children will be fostered through school educational programmes.

The European Union is counting on smart meters... but, will they be the solution to the need of saving energy at home?

In France, a "Linky Committee" has been launched to go deeper into these matters... controversies. Linky (the French Smart Meter) is a tool, a technological breakthrough, but not a tutor. Once the "novelty" is over, will the consumer slip back to old habits? What measures may assist the preservation of good habits, thus contributing to sustainable consumption?

A debate with the public is due in order to define *daily practices towards sustainability*.

### **Sweden**

## **EVOC/CAPA/SIMI set EVOC**

När du tänker på "hållbar konsumtion", vilka fem ord eller uttryck kommer du först att tänka på?

1							
2							
3							
4							
5							
			<u>CAPA</u>				
Läs följande	e påstående	n.					
Ringa in de	n siffra som	bäst stäm	mer överen	s med din a	asikt.		
1. I	jämförelse me	ed andra frågo	or, är hållbar ko	onsumtion en	viktig fråga:		
Absolut	1	2	3	4	5	6	Inte alls
2. E	ffekter av en i	cke-hållbar ko	onsumtion i vä	rlden kommer	att påverka m	ig personligen:	
Absolut	1	2	3	4	5	6	Inte alls
1. J	ag kan göra nå	got för att bid	dra till en hållb	ar konsumtio	า		
Absolut	1	2	3	4	5	6	Inte alls

### **SIMI Questionnaire**

You will find below twelve notions related to "SUSTAINABLE CONSUMPTION".

### Please mark:

- '+' in front of the four notions that *best* correspond to the ideas YOU have about sustainable consumption;
- '-' in front of the four notions that *least* correspond to the ideas YOU have about sustainable consumption.

(Four of the twelve ideas should remain unmarked.)

+, - or no mark	Description					
	Klimatförändring					
	Återvinning och minskning av avfall					
	Minska koldioxidutsläppen					
	Energieffektiva byggnader					
	Resursbevarande					
	Delaktighet hos medborgarnas för lokala åtgärder					
	"Grön" ekonomi					
	Ekologiskt lantbruk					
	Bevarande av biologisk mångfald					
	Kollektivtrafik					
	Konsumtion av lokalproducerade varor					
	Förnybar energi					

## Första steget

Vårt land står inför utmaningen att utveckla sätt att leva som inte längre skadar miljön. Steg för steg utvecklas nya vanor i alla delar av vårt dagliga liv. I alla delar? Nej, här finns åtminstone ett motstånd. Bilen.

Vägskälet för att möta utmaningen ligger transportfrågor. Alla behöver förflytta sig. Sverige ligger i täten när det gäller miljödägräder och under många är har medborgarnas livsstil gradvis utvecklats mot ökad miljömedvetenhet. Många människor sopsorteara, konsumtion av ekologiska produkter är bland de högsta i Europa och miljösatsningar blomstrar i våra större städer, utvecklingar som väckt uppmärksamhet och avund i hela världen.

Men ett mörkt moln hänger kvar: förbrukningen av fossila bränslen inom transport ligger fortsatt mycket högt i Sverige. Detta kan delvis förklaras av vår geografi och vårt klimat – men även vårt beteende whar betydelse.

Människor ändrar sina vanor steg för steg, vartefter olika innovationer gör sos mindre beroende av den egna bilen. Den här förändringen kan tillskrivas stegvisa försök att erbjuda varje medborgare möjligheter att vidta konkreta åtgärder.

#### FRI PARKERING

I samarbete med flera berörda organisationer har Värmlands kommuner beslutat att avskaffa gratis parkering för offentligt anställda. Ingen fri parkering vid arbetet? Åtgärden kräver att individuella behov vägs med omsorg. Undantag görs för anställda som idag helt saknar andra möjligheter än att ta den egna blien till arbetet. Men ändå, den här åtgärden har bi-

Men ändå, den här åtgärden har bidragit till att människor sluter samman och blir kreativa. Man ställer upp för varandra – ställer sig frågan "har jag kanske en granne som kan samåka med mig?"
På så vis kan den flexibla regeln vara

På så vis kan den flexibla regeln vara en tillfällig lösning som öppnar upp vägar för att finna hållbara alternativ för varje anställd.

Parallellt, med Silverbussen i London som förebild – ett tjusigt fordon som lockar affärsfolk att använda kollektivtransport – har utsmyckade bussar satts in i Karlstad innerstad vid högtrafikperioder. Dessa har blivit ett populärt val bland anställda som slutat använda den egna bilden: "Jag trodde väl aldrig att jag skulle känna mig som en modern hjälltinna genom att ta bussen!" skrattar Nina när hon väntar vid hällplatsen en kylig morgon.



#### ÅSKÅDAREFFEKTEN

Enligt Johanna Ullman, ansvarig för miljörfagor i Värmland 'verkar det som ow i tädigare utgjörde levande exempel på aksådareffekten – något fastarsfullt utspelades framför våra ögon, men ingen kände sig personligt berörd! Vem skulle stiga fram och ta ett eget ansvar? I praktiken är det också så att månniskor nårdare betenden och den enorma förändring som krävs för att hantera globala trender kan få vem som helst att känna sig maktiös. Vissa oroade sig för att betalparkeringssystemet skulle skapa konflikter. Men när den här möljigheten att vidta förändringar på individnivå väl etablerades blev det som en nesitis bro mot

mer omfattande åtgärder. Men, försäkrar Johanna Ullman, "människor tar det 
första steget, ser att det är möjligt, gör 
något konkret i stället för att bara orva 
sig för framtiden eller tillbringa en halv 
minut med att överväga någon diffus 
"inbjudan" att bli mer miljömedveten. 
Vi har kommit förbi informationsstadiet ... och är mogna för personlig och 
kulktiv handline"

kollektiv handling!
Pengar från betalparkeringen finansierar utveckling av nya transportlösningar, eller åtminstone nya möjligheter för
medborgara ät bidra till förändring.
Medborgarna är inte ensamma om att
ha fångats av stimulerande möjligheter.
Valda politiker har inspirerats av framgången hos åtgärder som leder till synliga konkreta handlingar, på tvärs mot
fattalistiska instillningar. "Alti

kan se en ny väg, men om män niskor förändrar sina attityder så är det ingen som märker det".

Parkering är första kapitlet i den stora boken som ska skrivas. Redan nu bidrar stadsplanerare, offentlig service och invinarna själva till att skissa den framida utvecklingen i Värmland med hänsyn till alta sapekter av vardagsliv, från boendemiljö till barnsäkerhet på vägar och i kollektivträfken. Man söker svar på frågor som: Hur kan man balansera spridning av bostäder till mindre kost-samma ytterområden samtidigt som jobben alltid koncentreras till tätortsområden? Hur skall man locka medborgare till sundare beteenden, utan att begränsa den individuella valfriheten? Hur ska vi alla bli moderna hjältar som tar hand om vår miljö utan att det inkräktar på vår personliga frihet? Första steget hat tagits. Me

9 JANVIER 2012

#### ENVIRONNEMENT/TRANSPORTS

## Första steget

Vårt land står inför utmaningen att utveckla sätt att leva som inte längre skadar miljön. Steg för steg utvecklas nya vanor i alla delar av vårt dagliga liv. I alla delar? Nej, här finns åtminstone ett motstånd. Bilen.

vägskälet för att möta utmaningen läger transportfrågor. Alla behöver förflytta sig. Sverige lägger i täten när det gäller miljöatgärder och under många år har medborgarnas livsstil gradvis utvecklats mot ökad miljömedvetenhet. Mänga människor sopsorterar, konsumtion av ekologiska produkter är bland de högsta i Europa och miljösatsningar blomstrar i våra större städer, utvecklingar som väckt uppmärksamhet och avund i bela vätiden.

Men ett mörkt moln hänger kvar: förbrukningen av fossila bränslen inom transport ligger fortsatt mycket högt i Sverige. Detta kan delvis förklaras av vår geografi och vårt klimat – men även vårt beteende whar betydelse. Människor ändrar sina vanor steg för

Människor ändrar sina vanor steg för steg, vartefter olika innovationer gör oss mindre beroende av den egna bilen. Den här förändringen kan tillskrivas stegvisa försök att erbjuda varje medborgare möjligheter att vidta konkreta åtgärder.

#### FRI PARKERING

I samarbete med flera berörda organisationer har Värmlands kommuner beslutat att avskaffa gratis parkering för offentligt anställda. Ingen fri parkering vid arbetet? Åtgärden kräver att individuella behov vägs med omsorg, Undantag görs för an-



ställda som idag helt saknar andra möjlgheter än att ta den egna bilen till arbetet. Men ändå, den här åtgärden har bidragti till att människor sluter samman och blir kreativa. Man ställer upp för varandra – ställer sig frågan "har jag kanske en granne som kan samåka med mig?"

På så vis kan den flexibla regeln vara en tillfällig lösning som öppnar upp vägar för att finna hållbara alternativ för varje anställd.

Parallellt, med Silverbussen i London som förebild – ett tjusigt fordon som lockar affärsfolk att använda kollektivtransport – har utsmyckade bussar satts in i Karlstad innerstad vid högtrafikperioder. Dessa har blivit ett populärt val bland anställda som slutat använda den egna bilden: "Jag trodde väl aldrig att jag skulle känna mig som en modern hjältinna genom att ta bussen!" skrattar Nina när hon väntar vid hållplatsen en kylig

#### ASKADAREFFEKTEN

Enligt Johanna Ullman, ansvarig för miljöfrågor i Värmland "verkar det som om vi tidigare utgjorde levande exempel på åskådareffekten – något fasansfullt utspelades framför våra ögon, men ingen kände sig personligt berörd! Vem skulle stiga fram och ta ett eget ansvar?" I praktiken är det också så att människor ofta känner sig paråyserade inför miljöfrågor. Det krävs att så många människor ändrar beteenden och den enorma förindring som krivs för att hantera globala trender kan få vem som helst att 
känna sig maktlös. Vissa oroade sig för 
att betalparkeringssystemet skulle skapa 
konflikter. Men när den här möjligheten 
att vidta förändringar på individnivå väl 
etablerades blev det som en positiv bro 
mot mer omfattande stjärder. Men, försäkrar Johannu Üllman, "männikor tar 
det första steget, ser att det är möjligt, gör 
något konkret i stället för att bara oroa 
sig för famtiden eller tillbring en halv 
minut med att överväga någon dijfis 
"inbjudar" att bli mer miljönedveten. Vi 
har kommit förbi informationsstadiet ....

och är mogna för personlig och kollektiv

Värmlands Nyheter

handling!
Pengar från betalparkeringen finansierar utveckling av nya transportlösningar, eller åtminstone nya möjligheter för medborgare att bidra till förändring. Medborgarna är inte ensamma om att ha fängats av stimulerande möjligheter. Valda politiker har inspirerats av framgången hos tägärder som leder till synliga konkreta handlingar, på tvärs mot fatalistiska inställningar. "Alla kan se en ny väg, men m män niskor förändrar sina attityder så är det ingen som märker det".

sa ut et nigen som man set uez.

Parkering är första kapitlet i den stora boken som ska skrivas. Redan nu bidrat stadsplanerare, offentlig service och in-vårarna själva till att skissa den framtida utvecklingen i Värmland med hänsyn till alla aspekter av vardagsilv, från boendemiljö till barnsäkerhet på vågar och i kollektivtrafiken. Man söker svar på frågor som Hur kan man balansera spridning av bostäder till mindre kostsamma ytterområden samtidigt som jobben alltid koncentreras till tiltortsområden? Hur skall man locka medborgare till sundare beteenden, utan att begränsa den individuella utaffriehere? Hur skav ai lab lib moderna hjältar som tar hand om vår miljö utan att det inkräktar på vår personliga frihet? Första steret har tætist.

### Environment/Transport

## **Taking the First Step**

## Our country is standing up to face the challenge of living in ways that no longer damage the environment

At the crossroads of this challenge: transport. Everyone needs to move around. Sweden is at the pole position in environmental policy and for several years our citizens have been conducting their lives in a more environmentally friendly manner. Many have learned to recycle household waste, consumption of organic foods is among the highest in Europe, and eco-zones are blooming in major urban conglomerations, attracting the envious regards of the entire world.

However, a black cloud still subsists: Swedish consumption of fossil fuels in transport remains very high. Our geography and our climate explain this in part – but our behavior is also at the root of this. People are changing bit by bit, as numerous innovative initiatives make us less dependent on our private cars. This change can be credited to a stepwise approach that has offered to each citizen the opportunity to take concrete steps.

Municipalities in the Värmland county, along with numerous enterprises installed in the sector, in this way have decided to eliminate free parking for civil servants and employees. Getting rid of free parking at work? This necessitates carefully taking individual needs into account. The rule has been relaxed for workers who today have no other possibility than to take their own car to work.

Still, this measure has encouraged people to draw together and become creative. They are looking out for each other – asking "don't I have a neighbour who could pool with me?"

The flexible rule in this way can be temporary – opening the way to finding an ecologically sustainable solution for every worker.

In parallel, copying on London's Silver Bus — a handsome vessel that encourages business people to use public transport — Värmland busses decorated with photos of centre city and its surrounding suburbs are making the rounds at rush hour. They have become the carriage of choice for the employees that have given up taking their car: "I never thought that I would feel like a modern hero by taking the bus!" smiles Nina as she waits at the stop one chilly morning. "It seems like we were living out the Bystander Effect — a terrible event was unrolling under our eyes, but no one felt personally concerned! Who could step up to take responsibility?" In fact, people often feel paralyzed by environmental issues. So many of us would have to change, and the immensity of change needed to address global trends would make anyone feel powerless. Some feared that the paid parking arrangement would cause conflict. But once this opportunity to change something individually was set up, it was like a positive stepping stone to vaster changes. "People are taking the first step, seeing that it is possible, doing something concrete instead of just worrying about the future or thinking for half a minute about vague 'invitations' to be more ecological. We are beyond the information stage... and into personal and collective action!"

The money coming in from paid parking is financing the search new transport solutions, or at least, for new opportunities for citizens to make a difference. They aren't the only ones to be caught up in the encouraging possibilities. Elected leaders have been galvanized by the success of policy that leads to visible, concrete actions.

Parking is the first chapter in a long book to be written. Already, urban planners, municipal services

and residents are sketching out the future development of Värmland. How to remedy the scattering of homes, caused by the constant search for cheaper building lots farther and farther from centre of town? How to entice citizens into better behaviours, while still leaving choices up to them? How can all of us become modern heroes, taking care of our environment without restricting our individual freedom?

## **Modified EVOC/CAPA questionnaire set**



## Shopping and white goods project

When you think of the term 'environmentally friendly', what are the five words or ideas that first come to mind?

1	
2	
3	
4	
5.	. 2011
UK EVOC data - December (All just one occurence, unle	

Γ
Group 1
ABC1, 8 persons, mixed gender
Recycling – 5
Carrier bags - 3
Global warming – 2
Green - 2
Ozone layer – 2
Car fumes
Cheap to run
Clouds
Emissions
Energy rating
Fad
Fast wash
Icebergs
Less effective
Less waste
Low carbon emission
More efficient
Non-pollution
Planet
Power
Reduce
Re-use
Trees
Wastage

Group 2
C2DE, 8 persons, mixed gender
Efficiency – 6
Recycling – 4
Emission – 2
Less electric – 2
Less waste – 2
Bye
Carbon footprint
Carrier bags
Clean
Fuel
Government
Green
Greenhouse gas
Hello
Ozone
Protection
Rubbish
Solar
Well built/made
Wind
Willia







### Shopping and white goods project

This exercise is about the issue of whether certain sorts of shopping are 'environmentally friendly' or not. In other words, whether their production and/or use tend to protect or damage the physical environment.

For the three guestions below, please circle the number corresponding to your personal opinion:

## a. Compared to other issues that relate to shopping, I think that environmental friendliness is an important issue:

Completely agree	1	2	3	4	5	6	Completely disagree

#### b. I think the effects of not protecting the planet will affect me personally:

Completely agree	1	2	3	4	5	6	Completely disagree

#### c. I think that I can do something to protect the planet through my shopping practices:

Completely	1	2	3	4	5	6	Completely disagree
agree							

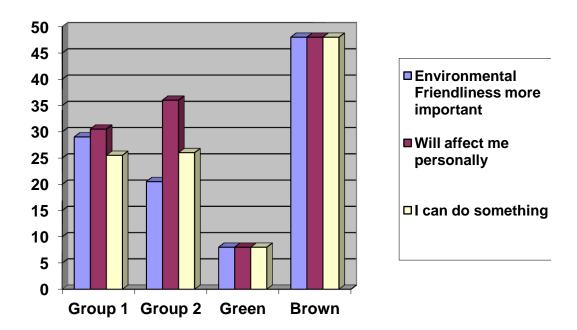
### UK data CAPA - December 2011

<b>Group 1</b> (ABC1, 8 persons, mixed	Group 2 (C2DE, 8 persons, mixed				
gender)	gender)				
"Environmental friendliness more	"Environmental friendliness more				
important"	important"				
2, 6, 3, 4, 2, 2, 5, 5	4, 4, 1, 3.5, 1, 5, 1, 1				
Total 29/48	Total 20.5/48				
"Affect me"	"Affect me"				
2, 6, 2, 3, 6, 5, 2.5, 4	5, 4, 6, 6, 6, 2, 3, 4				
Total 30.5/48	Total 36/48				
"I can"	"I can"				
3, 6, 2, 3, 1, 2, 3.5, 5	4, 3, 1, 3, 6, 3, 3, 3				
Total 25.5/48	Total 26/48				

A figure follows, highlighting that members of Group 1, in comparison to Group 2 of lower economic status, took environmental friendliness to be a prime consideration in white goods purchase, and in some cases also felt relatively immune to the effects of not protecting the planet.







"Resource allocation" exercise (identified as supplementary stimulus material)



## Shopping and white goods project

## Possible changes in information and protection for consumers

There is talk of governments in Europe introducing new measures to provide more information and protection to consumers when purchasing white goods like washing machines, refrigerators, dishwashers etc.

The main objective of these changes would be to make you, as a consumer, more confident about how long new or second-hand white goods could be expected to last, and how reliable they were likely to be.

In this exercise, you have a chance to VOTE for which is these measures you would like to see introduced. We have given you a number of red sticky 'dots'. These are your votes.

All you have to do is consider the four measures listed over the page, and decide which of them would be most effective is making you more confident about the durability (long lasting) and reliability (unlikely to break down) of a white product when purchasing a new or second-hand one.





Now cast your votes. If you think one measure is especially important, then you might wish to place all your votes on that option. If you think more than one would be useful, then you might wish to split your votes between a number of different options.

If you feel that some measures would be especially useful for specific products e.g. when purchasing a washing machine, then write this down.





Possible measures	which this measure would	Your vote (stick your red dots in the boxes below)
Quality marks – products carry a badge that ensures quality (what sort of organisation would be a trusted provider of such badges?)		
Service histories – Building in a 'milometer' of some kind that measures the amount of use a second hand product has received (or introducing 'logbooks' like the ones that cars have) that record use by previous owners).		
Lifetime information – Requiring manufacturers to make public information on how long a product is likely to last (this could be provided to purchasers on new products, or perhaps online so potential purchasers of second hand products could look up the information).		
Standard guarantees, warrantees – There could be obligation that guarantees and warrantees are only possible in simple, easily comparable, formats (what would be the best formats?).		







## Shopping and white goods project

## Selling a fridge exercise

Imagine you win in a prize draw a brand new fridge that perfectly suits your kitchen!

You decide to keep the new fridge and get rid of your old one.

The old one works perfectly well. You decide to try to sell it by placing a small ad in the window of your local Post Office.

Work in pairs to write an ad in the box below. Then we will see whether the other people in the group are tempted to make the purchase!







# Throwing away your domestic appliances?

And you thought buying was complicated...

In our era of online shopping, plenty of best price. But the war against unnecessary

resources are available to help consumers opti- expenditure does not end with the purchase mize their choices. Buying a basic household of a new product: the question of when and appliance such as a dishwasher can easily turn whether to replace it can remain crucial for a into an epic quest for the best machine at the household budget. Special report by Caitlin Howard

raditionally, a wise shopper held onto household appliances as long as possible. This approach has some environmental merits, simply because the less you throw away, the less waste you produce. It's mostly common sense: you don't get a new car each time you blow a tyre, and as a general rule, it's cheaper and smarter to get your car fixed than to buy a new one.

But care you apply the same reasoning to your old toaster? Why waste time and money trying to fix an appliance that is so easy and cheap to replace, especially when you have no guarantee that the operation will be successful in the long term? Clinging to old and dysfunctional objects can become frustrating, not to mention risky. Let's face it: nowadays, most white goods are not built to last, and once they break, it's often for good.

#### A new lease of life?

This doesn't mean that trying to extend your appliances' lifespan isn't worth it. A stitch in time saves nine, and indeed, a few maintenance tricks such as descaling your kettle can help prevent premature aging. But this approach also entails disappointments, as it's not always easy to separate bogus steers from bonus tips. The recent tests led by Which? on Limaway's limescale protection products, suggesting that these might actually not be efficient, should serve as a reminder to always watch out for phony marketing lures. "I felt really cheated when I heard that Limaway didn't protect my dishwasher" says homemaker Debbie Evans, "because the only reason I agreed to pay extra for it was that it would be beneficial to the machine."



## A few maintenance tricks such as descaling your kettle can help prevent premature aging

In fact, the most cautious consumers start thinking about when they'll have to throw away a product even before buying it. Indeed, purchasing sturdier appliances that will last longer can be a smart way to save -





→ money. "Yes, it's true that our laundry machines are more expensive than the average washer," admits RallyWhite Ltd. spokesperson Sean Conway, "but they're also designed and built to work twice as long." But while some companies such as RallyWhite choose to advertise the exceptional lifespan of their products, most do not include longevity in their technical specs, and this kind of information can be difficult to find. "Customers ask about how quick a machine is, or how big a load it takes," sales assistant Pete Anderson told us, "but rarely how long they can expect to keep a machine. To be honest," he adds, "I wouldn't really know how to answer myself."

#### A false economy

So is trying to run your white goods for as long as possible the most economical and environment-friendly approach? Well, maybe not. In the end, conserving white goods until they actually fall apart shelters consumers from technological progress – they miss out on new improvements in energy and water consumption, safety, and work-saving design. While adding to the pile of scrap may seem wasteful, in fact replacing your appliance a bit earlier might be a good trade-off. And if your old appliance is still in good shape but

# Purchasing sturdier appliances that will last longer can be a smart way to save money.

you just can't wait to get the new model, you might want to consider alternatives to throwing it away, such as recovering a bit of cash by selling your machine on a website like ebay.

"We all have friends who have got a monster fridge twice as big as the old one, just because it rates half as greedy..."

Likewise, you may be able to step up to a more recent model by scouring the second-hand white goods on offer. But there's another catch, as data analyst Lydia Taylor points out: "We all have friends who have got a monster fridge twice as big as the old one, just because it rates half as greedy... What we need to know is whether the savings potentially offered by better modern performance just get eaten up by the wasteful behaviours they encourage!" If you think about it, large fridges may encourage filling up with food which then goes out of date - thus both energy and food can be wasted. Just like buying, throwing away requires a good sense of timing and judgment on both economic and ecological criteria. While people tend to favour their wallet over the planet, it's useful to remember that the two can go hand in hand.