



Effectiveness of programmes aimed at household energy conservation

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Workshop on Information Campaigns
and Other Measures
for Energy Consumption Behavioural Changes

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?

INFORMATION

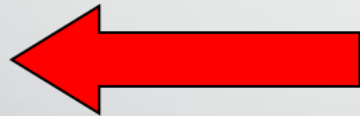


AWARENESS



**ACTIONS,
PRACTICES' CHANGES**

Levers to changes



Brakes to changes

Objectives

- **Question the rational-actor paradigm**
 - Information → concern → behavioural change
 - Derived from economics
 - Used in social psychology (Ajzen & Fishbein, 1980)
 - Focus on rational calculation, personal preferences, choice, consumers' freedom
 - Information = main policy tool
 - = **criticize the information deficit model**
- **Show relevant sociological, anthropological & psychological factors**
- **Propose alternatives (Stoknes, 2014)**

Outline

- **Approach and conceptual framework**
- **Sensitisation campaigns**
- **Other information tools (energy labels and certificates)**
- **Conclusion**

Approach

- **Reviews in sociology, psychology, economics**
- **No focus on methods of evaluation**



General **knowledge** on climate change
issues and factors **and** daily **practices**

Knowledge on climate change and energy-related daily practices

- On the whole, no clear association between energy-saving practices and
 - Knowledge on climate change
 - Knowledge on renewable energies
- Importance of social norms on comfort, convenience and cleanliness (Shove, 2003)
- BARTIAUX F., G. VEKEMANS, K. GRAM-HANSEN, D. MAES, M. CANTAERT, B. SPIES, J. DESMEDT, 2006, *Socio-technical factors influencing Residential Energy Consumption*, SEREC. Belgian Science Policy Office, Brussels, 222 p.
http://www.belspo.be/belspo/organisation/publ/pub_ostc/CPen/rappCP52_en.pdf

Limit of the information

- Relevant finding (among 25 in-depth interviews):
- *"Well, it's true that there are things to do and not to do when it comes to the environment. But I think that **one can ring alarm bells as much as one wants, only those who want to hear it will hear it**" (Catherine).*

A WWF **sensitisation campaign**
on the ecological footprint
directed **to adults**

***"one can ring alarm bells as much as one wants,
only those who want to hear it will hear it"***

A test!

A sensitisation campaign with the ecological footprint
run by WWF-Belgium, October 2006, Internet questionnaire
Adds & tips in major newspaper, mails
N = 33 186 → 29 778



10 questions on practices
Food, Energy use, Mobility,
Tourism
Estimation of footprint
17 possible commitments
e-mail, gender, age group, ...

'Very green' practices reported	<u>Less open</u> to environmental information %	<u>More open</u> to environmental information %
Fruits & vegetables: local, seasonal, not frozen	30,1	33,8
<u>Meat</u> < 4 times/week	25,3	29,0
Small dwelling, very well insulated, heated econom	5,0	4,2
Small dwelling & quite concerned for electricity	13,5	14,8
Never uses a car (not sig.)	9,7	8,9
Tourism in Belgium or nearby	31,6	28,5
Mean	1,151	1,191

Practices → Information?

Socially accepted ways of dealing with the 'gap'

- **Practices' compartmentalisation**

(cfr means: 1,151/6 if less open to environmental information
1,191/6 if more open to environmental info)

→ Eclectism more valorised than consistency

- **Search for confirmation & 'self-esteem bonuses'** (Moezzi)
- **Moods** = "feeling a disengaged implication" (Martuccelli, 2002)

Ex: "For electricity and appliances: ... some family members fall asleep in front of the TV (*I do not* go around in the living room and all bedrooms late at night to "*play the extinguisher*")." (F40)



Sensitisation actions on climate change directed **to children**

Prends le pouvoir - Windows Internet Explorer

http://www.prendslepouvoir.be/

Google

Prends le pouvoir

Pour une raison évidente d'économie d'énergie, la lumière restera éteinte durant la totalité du cafilm.

Tu es un consommateur d'énergie raisonnable ?
Tu es carrément énergivore ou tu es un parfait exemple à suivre?
CALCULE ICI TON PROFIL ENERGETIQUE

Prends le Pouvoir
et gagne ton iPod shuffle

Pleins d'**INFOS UTILES** pour économiser l'énergie et tout comprendre

Tu as entre 6 et 9 ans?
Participe au concours d'expression "**JE PROTEGE MA PLANETE, J'ECONOMISE L'ENERGIE**" et gagne un magnifique vélo

NOTICE LÉGALE

Green classes...



- Coordination between school and specialised organisations (green classeslibrary, museum, big sweater day, festival of sciences...)

printemps des sciences

Avec le soutien de la Ministre de l'Enseignement supérieur et de la Recherche scientifique



Greenhouse effect

- Principe
- Consequence on vegetation
- Action: shared or public transportation

⇒ **what for children?**

- 
- To which conditions do the children transfer energy-saving messages and practices at home?

Do the children transfer energy-saving messages and practices at home? Yes if...

- Parents recognise and help **develop a strong child's agentive power**
- At home, there are **some** energy-saving **practices** & messages
- The other agents of socialisation (school, TV, Internet...) provide the children with **environmental education**
- Parents have a **high participation** score: they relay, comment & exchange environmental information, advice or practices issued by the other agents of socialisation (Kellerhals & Montandon, 1991)
- ➔ This type of cooperation between different socialisation agents would **relieve children from doing often alone this coordination** between their parents, their school and the media
- Bartiaux F., 2009, "Between school, family and media: Do the children carry energy-saving messages and practices?", *Act! Innovate! Deliver!*, ECEEE ed(s), 2009, ECEEE 2009 Summer Study, 1897–1906.

http://www.eceee.org/conference_proceedings/eceee/2009/Panel_8/8.391/

- Children and sensitisation campaigns:
always 2 'side-effects'
 - Children also learn of **their agentive power**, both on themselves and in the family, to change or not energy-related practices
 - Children also learn **socialised ways of linking** their environmental knowledge or **concern with** their energy-consuming **practices**:
*cfr contradictions, laughs or impersonal "one tries"
or "one should try"*



Energy assessments and energy performance certificates

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- **Energy Assessment Procedures (after the EPBD)**

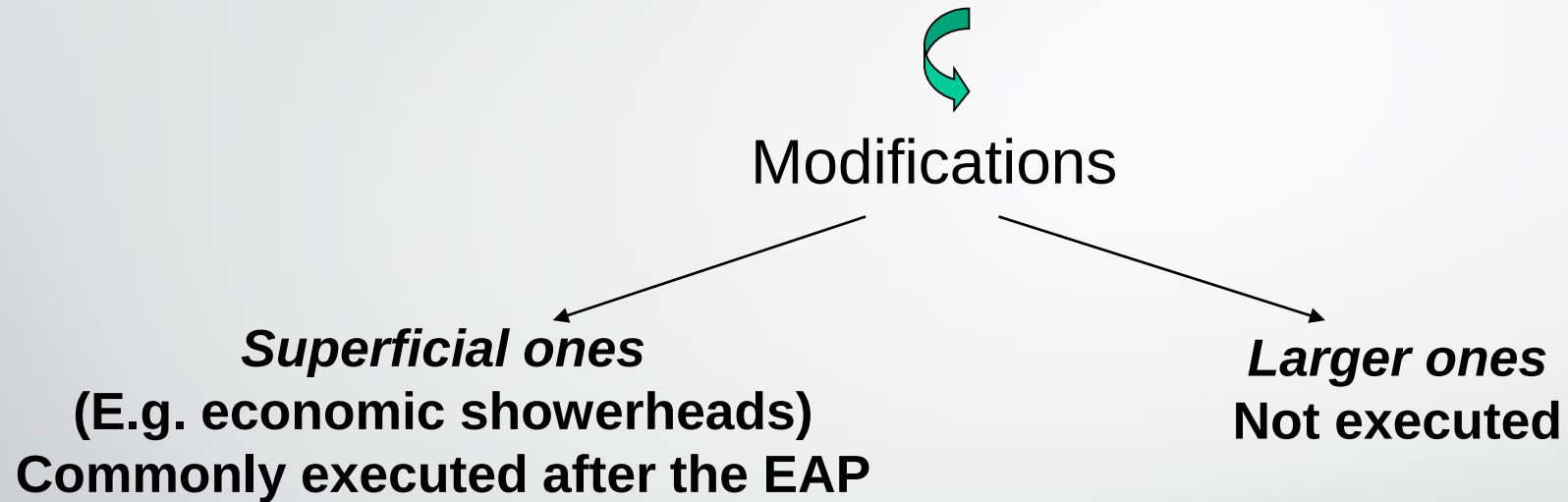
**1- Are the procedures really implemented?
How are they enforced?**

→ Is the energy certificate linked to other legal instruments (*e.g.* fiscal ones)? Or is it in fact optional?

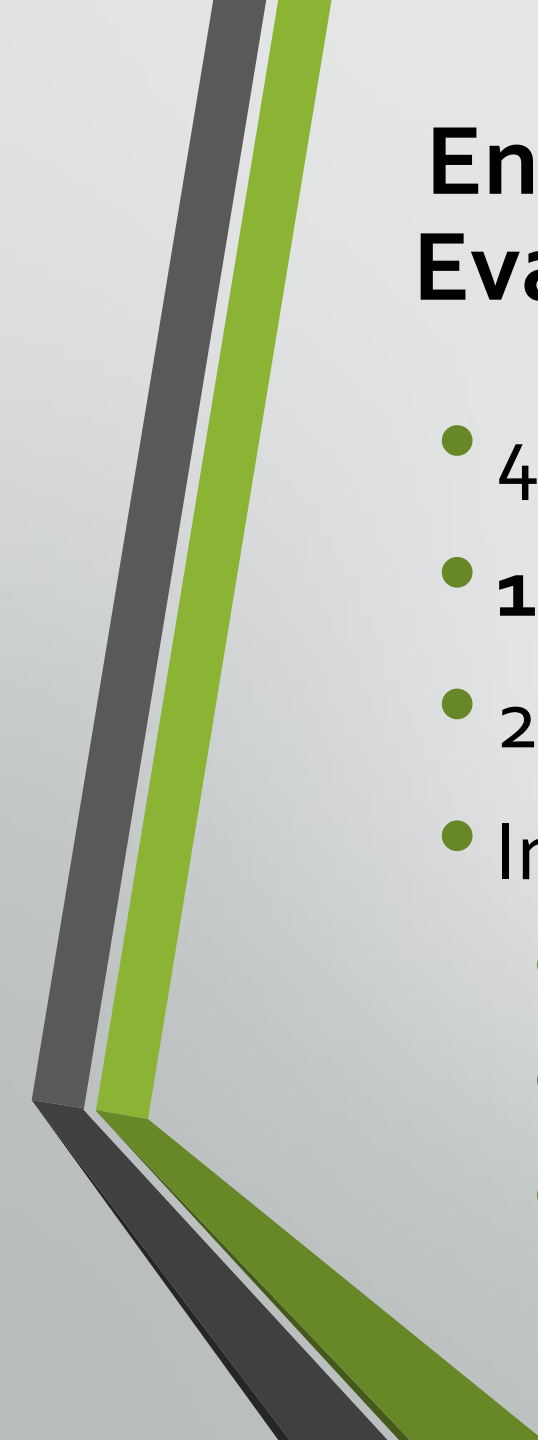
2- Are the recommendations implemented?

Acceptance and effects of the energy assessment

EAP : more objective and more complete information



*Information and advice from the audit can lead to thoughts,
but not necessary to (immediate) change*



Energy assessment (envelope, heating, hot water): Evaluation in terms of changing behaviours

- 40 households received an energy assessment
- **11% of recommendations applied after 1 year**
- 23% of recommendations 'planned' after 1 year
- In-depth interviews
 - 12 households
 - After 2-3 months (3 after 1 year)
 - Compared with similar interviews in Denmark

Customised knowledge and few action: why?

- **Need of discursive consciousness**
 - Practical and detailed information needed (insulation)
 - Practical consciousness, context important
 - *Importance of perceptions: "We do not feel any discomfort" / "The usefulness of insulation, you feel it"*
 - → Hypothesis (household-waste sorting policies in 1990's)
Perceived obligation, a modality of discursive consciousness

Customised knowledge and few action: why?

- **Need of consistent information**
 - With intermediaries (heating installer, architect, ...)
 - With trusted family members, friends, ...
 - With self-gathered information (internet, ...)
 - Already heard before
 - → hypothesis: **social comparison, a modality of discursive consciousness**
- No mistrust in experts (Belgium/Denmark)

Customised knowledge and few action: why?

- **Need of social support**

- Need of socially legitimated rationales for saving energy (≠ economy and environment)
- Saving energy seems incompatible with status showing (spec. if rapid upward social mobility)
- Need of family-members support (spouse, father,...)

- **Enhanced self-esteem**

- Make the recommendation his/her own project
- In line with previous investments

Gram-Hanssen K., F. Bartiaux, O.M. Jensen, M. Cantaert, 2007. "Do home owners use energy labels? A comparison between Denmark and Belgium", *Energy Policy*, 35, pp. 2879–2888.

In 10 EU MS: energy certificates have little effect

- The EPBD is not having any substantial influence on the practice of renovating houses.
- The EPBD intends to label buildings, with procedures varying per country, while wishing at the same time to pushing persons (home owners) to enrol themselves in a (still non existing) practice of energy renovating.
- Thus a social practice cannot be 'created' only by a law or a Directive before being sustained by common and conventionalised routines, both mental and behavioural, shared know-how and ends.

A study in 10 EU MS on energy certificates

- 'Energy renovating' is not (yet?) a practice in 4 countries (BE, DK, LV, PT)
 - despite the EPBD and the efforts of the energy advisors to create such a practice
 - Because for the professionals
 - know-how is fragmented and differentiated between several types of professionals (carpenters, heating installers, frames and windows installers...)
 - No common goal ('to save energy where ever possible in a building')
 - they do not recognise themselves as 'energy-savers practioners' (but some DIYers do)

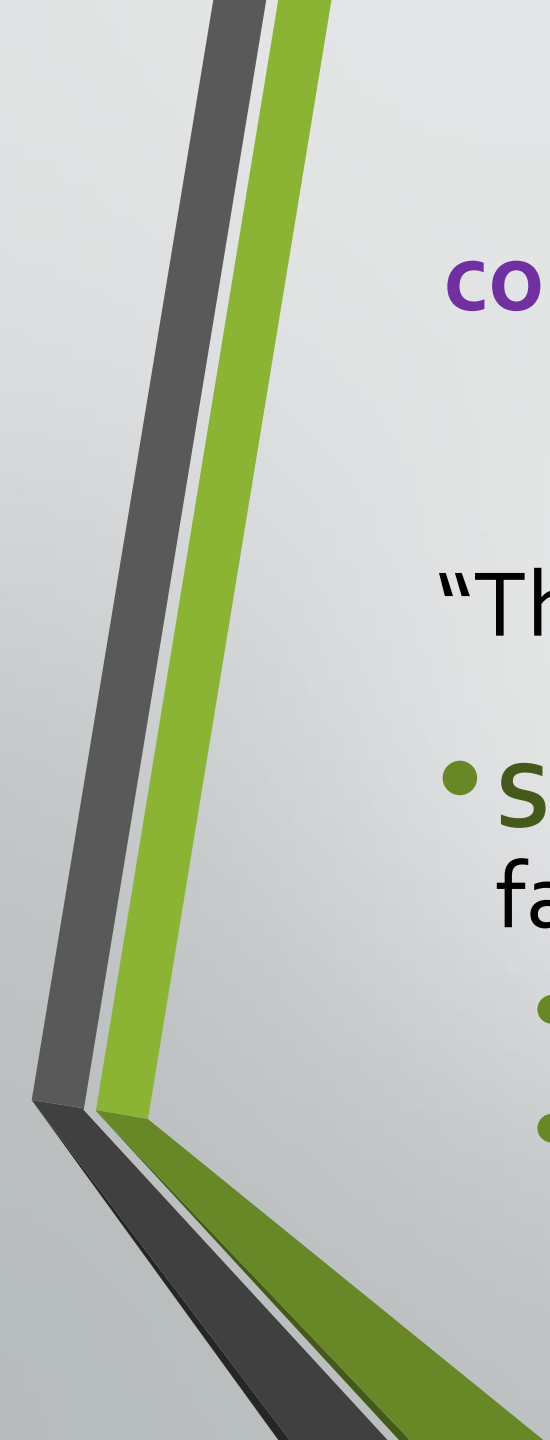
No information needed...

- Maybe the Latvian study of apartments: + coherent case on this way of creating this new practice of energy renovating, as **many factors converge to require urgent energy-saving renovations**:
 - its **old building stock** mainly made of post-soviet apartment blocks,
 - **cold winters**
 - a majority of home owners feeling coldness, a more **unacceptable feeling** given current norms on comfort
 - a majority of home owners unable to pay a **more and more expensive energy**

Bartiaux F., Gram-Hanssen K., Fonseca P., Ozoliņa L., Christensen T. H. (2014), "A practice-theory approach to homeowners' energy retrofits in four European areas", *Building Research & Information*, 42 (4), 525–538.



Other socio-anthropological factors of reluctance for change



Fear of losing his/her beliefs and commitment in a consumption society

“The energy prices are quite decent”

- **Social upward mobility** (and its rapidity in the familial trajectories) associated with an
 - absence of an economic motivation for energy savings
 - absence of an openness to environmental information

Fear of a social devaluation of subjectivity

- **Least** production of a sense of **solidarity**
 - Irony
 - Importance of having own children
- Climate-change consequences appear to be distant in time & space
- Valorisation of eclecticism

Fear of being isolated, disconnected

- Energy advice must be supported by significant others to be applied
- Energy consumption (not energy savings): a mean of being included in consumerist societies



Propose alternatives

Barriers/Requirements for effective climate communication

Source: Stoknes, 2014, 165.

1. Climate issue is construed as distant
2. Climate issue is framed as disaster, cost & sacrifice
3. Dissonance: the lack of convenient climate-friendly behaviours weakens attitudes over time
4. Denial: refuge for fear, guilt and threats
5. Identity overrides the facts

1. Feel personal, near and urgent
2. Other than negative effects
3. Provide opportunities for visible actions
4. Avoids triggering the emotional need for denial
5. Reduce political and cultural polarisation on the issue

Psychologically-based alternatives (Stoknes, 2014)

- Use the power of social networks (social comparison)
- Reframe the climate messages with supportive frames
 - Insurance, protection, health, opportunity
- Make it simple to choose eco-friendly by nudging
- Use the power of narratives
 - ≠ apocalypse! Ex: creative and small-scale initiatives in the green economy
- Develop and use new indicators for societal progress

Source: Stoknes, P. 2014. Rethinking climate communication and the “psychological climate paradox”, *Energy Research and Social Science*, 1, 161-170.

Psychologically-based alternatives (Stoknes, 2014, 169)

These new climate communication initiatives must be aware of and actively address the psychological barriers:

- makes the climate issue felt as being **more personal** (less distant),
- while utilizing **more constructive framings**,
- nudging the public **toward actions**
- so that **cognitive dissonance and denial are reduced**,
- telling **new stories** of opportunity and **attractive futures** with appeal **across the political spectrum**, and,
- giving meaningful signals and response **indicators on our progress** toward societal transformation.

Source: Stoknes, P. 2014. Rethinking climate communication and the “psychological climate paradox”, *Energy Research and Social Science*, 1, 161-170.

Alternative policy tools?

- Question the central role given to information as main policy tool: neither general nor customised knowledge brings about environmentally friendlier action
- !!!Important result!!! The higher the income, the better informed, the higher energy consumption
- → To de-compartmentalise practices: **Personal Carbon Allowance** or **Personal Carbon Trading Scheme**

Personal Carbon Trading Scheme

www.eci.ox.ac.uk

- Tool to 'decompartmentalise' practices in ≠ areas
 - Energy use:
heating and electricity
 - Daily mobility
 - Tourism
 - ... Food
- Problems of politics and of implementation must first be solved



Other policy tools?

- To de-compartmentalise practices: **progressive tariffs on gas and electricity**
- In general, policies for sustainable energy consumption provide
 - Discursive consciousness (via perceived obligation)
 - Social support and social legitimacy
 - May bring relief from making individual choice that would be conflicting with social normality, as contextually defined

Conclusion

- A **societal self-deception** hypothesis? ≠ from “climate fatigue” or “apocalypse fatigue”
- Propose the hypothesis of an **active ignorance of environmental issues?**
- Explore its societal function: hypothesis of **a societal self-defence mechanism against the loss of myths** (consumption society, valorisation of subjectivity)?



Thank you for your comments!

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