The Seeds of Sustainable Consumption Patterns

Presentation at AIST workshop
“Life-cycle approaches to sustainable consumption”
Tokyo, 19-20 March 2003
Edgar Hertwich, IIASA
www.iiasa.ac.at/~hertwich/
www.tev.ntnu.no/edgar.hertwich/

Defining sustainable consumption

- Sustainable consumption patterns are patterns of consumption that satisfy basic needs, offer humans the freedom to realize themselves, and are replicable across the whole globe without compromising the Earth’s carrying capacity.
- Sustainable consumption consists of measures to reduce impacts that affect the behaviour of the consumer or require her actions.

Sustainable consumption research

1. Rationale for sustainable consumption (moral philosophy)
2. What are present consumption patterns? What impacts do they cause?
3. How do consumers behave, reason, make decisions? (Energy efficiency, ecolabels)
4. What fields should policy pay attention to? What indicators should policy makers use to track progress?

Sustainable consumption research

5. Examples, policy measures, implementation
   - Hrauda: Homeservice company for PSS
   - Cooper: product durability, long-life, slow food
   - Hutterer: Product repair and upgrade
   - Hofstetter: efforts & dreams of the WWF to inform consumers
   - Obersteiner: ICT and newspaper consumption in Egypt
   - Yagita: Quantifying the acceptability of SC measures
WSSD’s 10-year program requires concrete action. How can that look like?
Specific actions on the micro-level are required to achieve changes on the larger scale. Examples can provide pointers to how these measures might look like. What works? How does it work? Is it replicable? What does it take to make a more general success?


Vringer & Blok, Energy Policy, 1995
Examples of sustainable consumption

34 examples described in 4 functional areas (mobility, housing, nutrition, clothing), for appliances, and for lifestyles
Keyfitz’ Classification: pollution control, mechanical efficiency, use efficiency, lifestyle
Working mechanisms: availability of sustainable solutions, behaviour, intensified use, infrastructure, changing set-up

Multiple levels of analysis

Different levels of analysis reveal different insights:
Analysis of specific products and their use can reveal opportunities for eco-efficiency.
Analysis of functions, such as nutrition, can reveal opportunities for alternative ways or styles of provision.
Analysis of lifestyles can reveal general patterns, differences, social trends. It can full account for the rebound effect.
EU Energy Label

This label must be displayed on all new domestic refrigerators, freezers, washing machines, electric tumble dryers, and dishwashers by law.

The main focus lies on
• energy use
• water consumption

FUNSERVE – Functional Service Contracts for White Goods

• Households pay the electric utility for the use, e.g., of a washing machine. Utility provides the washing machine and the electricity. Responsible for repair and disposal.
• Test of concept indicates substantial popularity and potential.
• Provides consumers with more efficient appliances – finance mechanism & shows true costs

Northern Light – Climate Protection to Join in

Project Parts:

<table>
<thead>
<tr>
<th></th>
<th>Less is more (car driving)</th>
<th>Sum of energy efficient appliances</th>
<th>Sum of kilometres saved (in one month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving electricity and water</td>
<td></td>
<td>24 230</td>
<td>295 354</td>
</tr>
</tbody>
</table>

Due to “Less is more”, about 66 tons of CO2 could be saved in.

This Participative Social Marketing campaign operates mainly through multipliers.

The WashRight Campaign

- Avoid underfilling the machine
- Measure according to water and soil hardness
- Use the lowest recommended temperature
- Reduce packaging waste

[www.washright.com](http://www.washright.com)
Global Action Plan / Action at Home

Action at Home provides people with a workbook of practical steps to reduce energy consumption, water use, car use etc. It includes an initial & a final assessment. In the US it works with volunteer guides in small neighborhood groups. In the UK, more individualistic.

Through Global Action Plan provides a lifestyle magazine and consumer guide to sustainable living

Working mechanism of Action at Home

Awareness

Desire to act

Change in routine

Purchase of green good

Knowledge what to do

Reduced resource consumption

Car-free Housing in Vienna - Floridsdorf

92% of residents do not own a car or motorcycle
57% are member in a car-sharing organisation
77% own a periodical public transport pass

Working mechanism of car sharing example

Financial constraints

Environmental awareness

Membership in car-share organization

Increased marginal cost of car use

+ No own car

Reduced car use
Examples

- Daily routine decisions (Action at Home, WashRight, Nordlicht)
- EU Energy Label – Investment decision and availability (effect on production)
- Funserve: investment
- Vienna: Infrastructure plus institutions

Affecting long-term change

- Habits, inertia, feedback loops, self-reinforcing trends
- Focus on decisions with permanent effects of individuals (habits, where to move? how many people in a household?) and of society (institutions, infrastructure!!)

Research in support of effective SC policy

- The focus on concrete measures and examples sharpens the lens of sustainable consumption research
- Examples can act as seeds; analyse them, design measures, test, implement, evaluate => learning process
- Focus where there is the largest potential for change: decisions which set stage for daily consumer behaviour: infrastructure, availability, organisation of routines, habits. Catch consumers at critical points in their life.