the ABC of energy efficiency and behaviour
Individuals have attitudes.

Attitudes towards personal consumption, waste and responsibility need changing.

Attitudes are changed by persuasion and information.

Attitudes drive behaviour.
B is for Behaviour

Behaviour is what individuals do.
Behaviours need changing.
Behaviours are driven by attitudes and prices.
People choose how to behave.
Choices are made by individuals. If individuals chose not to use so much energy we’d not be in the fix we are.

Policy makers need to encourage individuals to make different choices.
A FRAMEWORK FOR PRO-ENVIRONMENTAL BEHAVIOURS
Defra January 2008

This report sets out a framework for Defra’s work on pro-environmental behaviour. It pulls together evidence on public understanding, attitudes and behaviours; identifies behaviour goals; and draws conclusions on the potential for change across a range of behaviour groups.

The headline behaviour goals
- Install insulation - Better energy management - Install microgeneration - Increase recycling - Waste less (food) - More responsible water usage - Use more efficient vehicles - Use car less for short trips - Avoid unnecessary flights (short haul) - Buy energy efficient products - Eat more food that is locally in season - Adopt lower impact diet
Representation of energy efficiency and behaviour

Driving factors, e.g. attitudes

Change driving factors, e.g. attitudes

Drivers include:
- Attitudes
- Society
- Economics
- Other people
- Habit

Externalise pretty much anything, including own role

Drivers can also be barriers

Better chosen behaviour

Chosen behaviour

Itself a driving factor

Drivers include:
- Attitudes
- Society
- Economics
- Other people
- Habit

Externalise pretty much anything, including own role

Drivers can also be barriers
Assume change unless blocked by barriers. Barriers include pretty much anything.

Gaps and barriers

Assume attitude-behaviour association and then worry about the gap: efficiency not adopted.
**Behaviour and the adoption of energy efficient technology**

Drivers, attitudes, price, persuasion affect the rate of diffusion and adoption.

**BUT…**

From science and technology studies, the ‘it’ doesn’t stay still

‘innofusion’
‘context-object’
‘failure’

The S-curve of adoption of an innovation
E. M. Rogers, diffusion of innovation
Geels 2002: note no place for ‘behaviour’
Separate technology and behaviour
Individualise ‘behaviour’ – choice and attitude
No history, no existing infrastructure
Context as a driving factor
Kitchens and bathrooms

What do people do in the kitchen and the bathroom, how is this changing and with what consequence for sustainability?

Sites in which technologies, conventions and injunctions co-evolve.

Sites of innovation in practice.

Hot spots of water, energy and resource consumption

Martin Hand
Sociology, Queens University, Ontario
Elizabeth Shove
Sociology, Lancaster

Dale Southerton
Sociology, Manchester
Alan Warde
Sociology Manchester
Framing freezers

An established appliance: the ‘need’ is now for more freezers, larger freezers and more types of frozen space: we discover co-existing, sticky links between freezing, food and family

Preservation and procurement

Convenience and temporal coordination

Marginalisation and specialisation

Value for money

Self service

Frozen as last resort
Freezer Lessons

1. Material objects as part of a system

2. The ‘object’ changes as the system changes

3. Design and consumption are implicated in the reproduction and transformation of everyday life
Assembling everyday life
Suites of technology and practice

Ordinary, everyday life

meta concepts of injunction, normality, having and doing, practices and systems of practice
Technology and practice

21 degrees C
Technology and practice
Changing ideas and conventions of comfort

6 to 30 degrees C; 20 to 28 degrees C; 22 degrees C.
Social Practices

Practices are made, sustained and reproduced through processes of making and breaking links between elements.

- Materials/objects
- Competence/procedure/skill
- Images/symbolic meanings
Bundles and complexes of practice

Circulating elements
<table>
<thead>
<tr>
<th>Theories of practice</th>
<th>Theories of consumer behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared, social</td>
<td>Individual choice</td>
</tr>
<tr>
<td>Endogenous dynamics</td>
<td>External drivers</td>
</tr>
<tr>
<td>Specific cultural and material histories</td>
<td>Common base in belief</td>
</tr>
<tr>
<td>Reproductive, generative</td>
<td>Causal</td>
</tr>
</tbody>
</table>
Theories of practice

Technology is part of practice

Endogenous dynamics

Specific cultural and material histories

Reproductive, generative

Theories of consumer behaviour

Technology is autonomous

Linear process of diffusion

Adoption in isolation

Needs and desires external
Requires an extended vocabulary
Demand is an outcome of practice. Practices are dynamic, changing all the time, emergent, systemic.
is for infrastructure and institution

Practices are embedded in, and are reproductive of material and cultural infrastructures and institutions.

Though often invisible in policy debate, these are key sites of order and transformation.
is for practice

Practices exist beyond specific performances;
they consist of interconnected sets of norms, conventions, understandings, embodied know-how, states of emotion, arrays of material things;
they are made and transformed in and through moments of performance — heating, cooling, washing, eating, travelling, etc.
Most energy consumption is routine, inconspicuous and habitual.

Routines change, but not through price and persuasion.

For regimes of practice, see systems
is for systems and services

Practices intersect to form bundles, complexes and regimes. These have different systemic qualities.

Services like comfort, cleanliness and convenience are relevant units of demand (not resources as such).
is for transitions, tipping points and transformations

Practices and systems of practice are not stable.

Transition and transformation is normal.

For policy, the challenge is to understand transitions in practice.
Relevant resources in social theory

consumption, material culture, actor network theory, technology studies, cultural theory, theories of practice, histories of sociotechnical change, transitions, innovation studies….

How do sustainable practices take hold?

How do unsustainable ones persist and die?

How do the elements of sustainable practices travel?

How do practices circulate, diffuse and shrink?

Ideas adopted in climate change policy (business and government)