

Sustainable Development Research Network workshop: Royal Society of Arts, 4th December 2006



**Measurement methods to
inform SCP policy-making:**

**What do policy makers need
to know?**

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A One Planet Economy

Securing the Future, 2005

- **Better products and services** which reduce the environmental impacts from the use of energy, resources or hazardous substances
- **Cleaner, more efficient production processes** which strengthen competitiveness
- **Shifts in consumption** towards goods and services with lower impacts



Key questions for the evidence base

- **How much better do products and production processes need to be?**
- **What degree of change in consumption patterns is needed?**
- **What household activities generate the biggest impact?**
- **Which products or services generate the biggest impacts?**
- **Where in product lifecycles do the biggest impacts occur?**
- **Where, geographically, do key product impacts occur**
- **Are we reducing impacts or simply exporting them?**
- **How far will current policies take us towards goals and what other action is needed?**

What kind of evidence is useful for policy?

- **Characteristics** of SCP evidence:
 - diverse, multi issue, multidisciplinary,
 - big-picture, business, products and consumption perspective,
 - can itself be an instrument for change

- Need for **strong policy connection** for evidence to be useful – involvement of policy end user with researchers in scoping research questions

- Importance of **interpreter role**: people who can bridge the gap between academic and policy environments

Evidence for SCP: Overview of progress

- Defining evidence needs for SCP policy 2004 – present
 - Pilot work for Defra Evidence & Innovation Strategy
 - Established Expert Advisory Group to provide strategic overview
 - Statement of evidence needs, policy consultation
 - Research priority workshops with stakeholders

- Building evidence (Oct 2005 – present) through targeted research programme.

- Major themes: Scale of the SCP Challenge, products strategy, sustainable consumption, business and environment, food

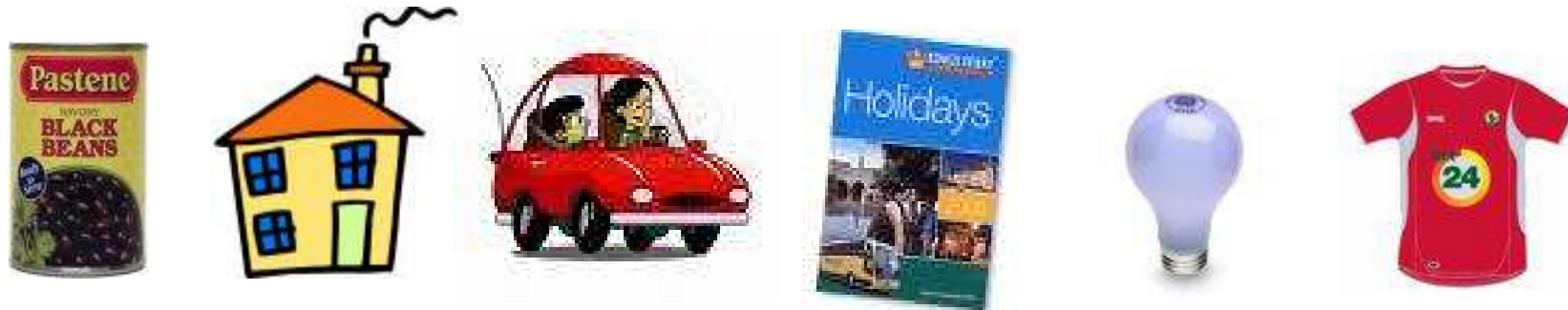
Measurement of SCP: Recent Defra work

- EV02001: Review of resource flow methodologies (SEI, published)
- EV02033: Developing indicator for embedded carbon (SEI, ongoing)
- EV02002: International impacts of UK and EU consumption: biodiversity (Scott Wilson, published)
- EV02019: Sustainable commodities (Scott Wilson, ongoing)
- EV02014: Review of ecofootprinting methodologies (RPA, published)
- EV02024: A Review of the Practical Use of Ecological Footprinting (RPA, ongoing)
- EV02034: Short Evidence Study on UK Priority Products and Services (BRASS, ongoing)
- NR0102: Identifying Environmental Limits (Univ. Nottingham, published)

<http://www.defra.gov.uk/environment/business/scp/research/themes/index.htm>

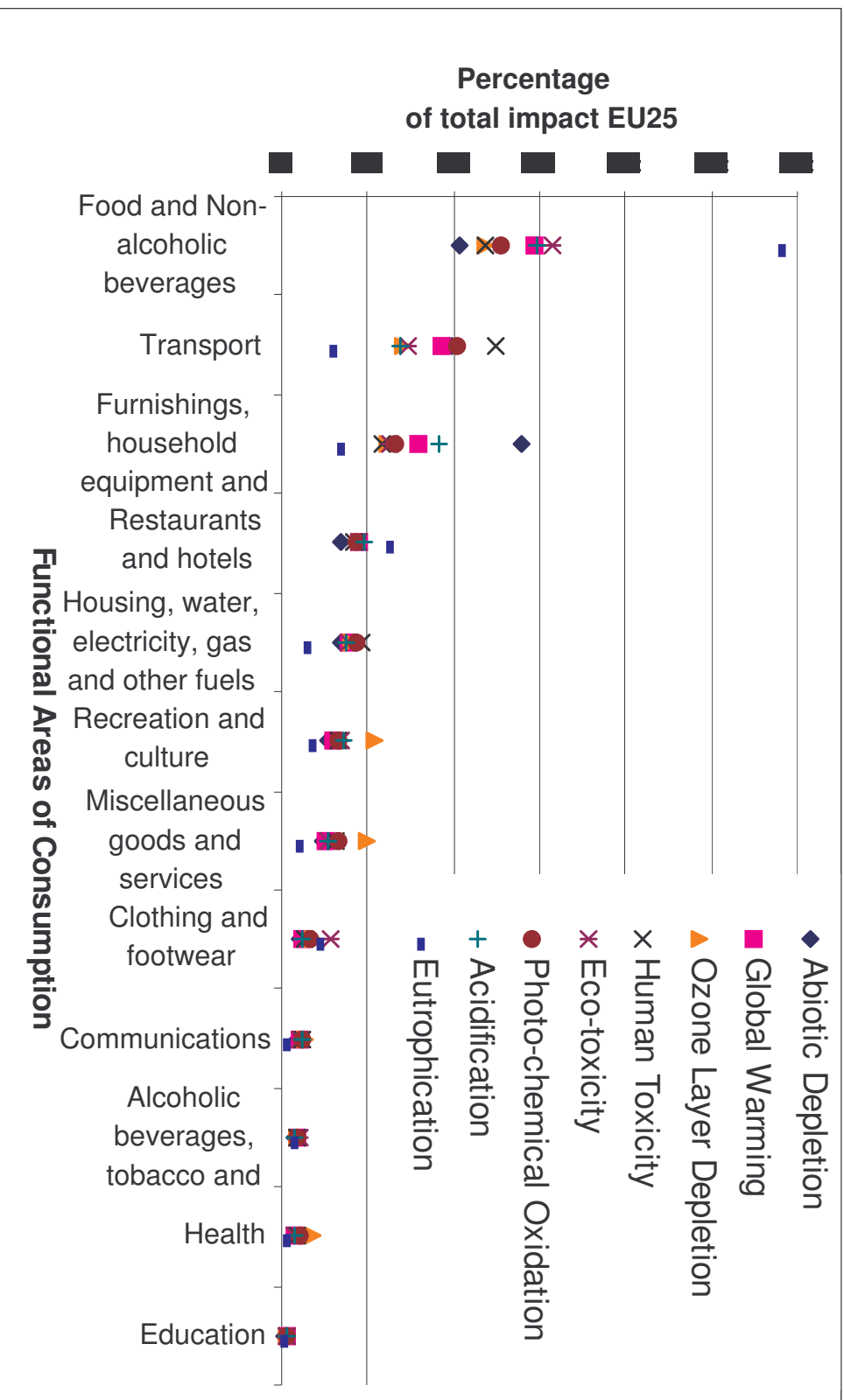
What do we know so far?

- Consensus on highest impact consumption areas (EIPRO, EEA, Carbon Trust and Counting Consumption reports)

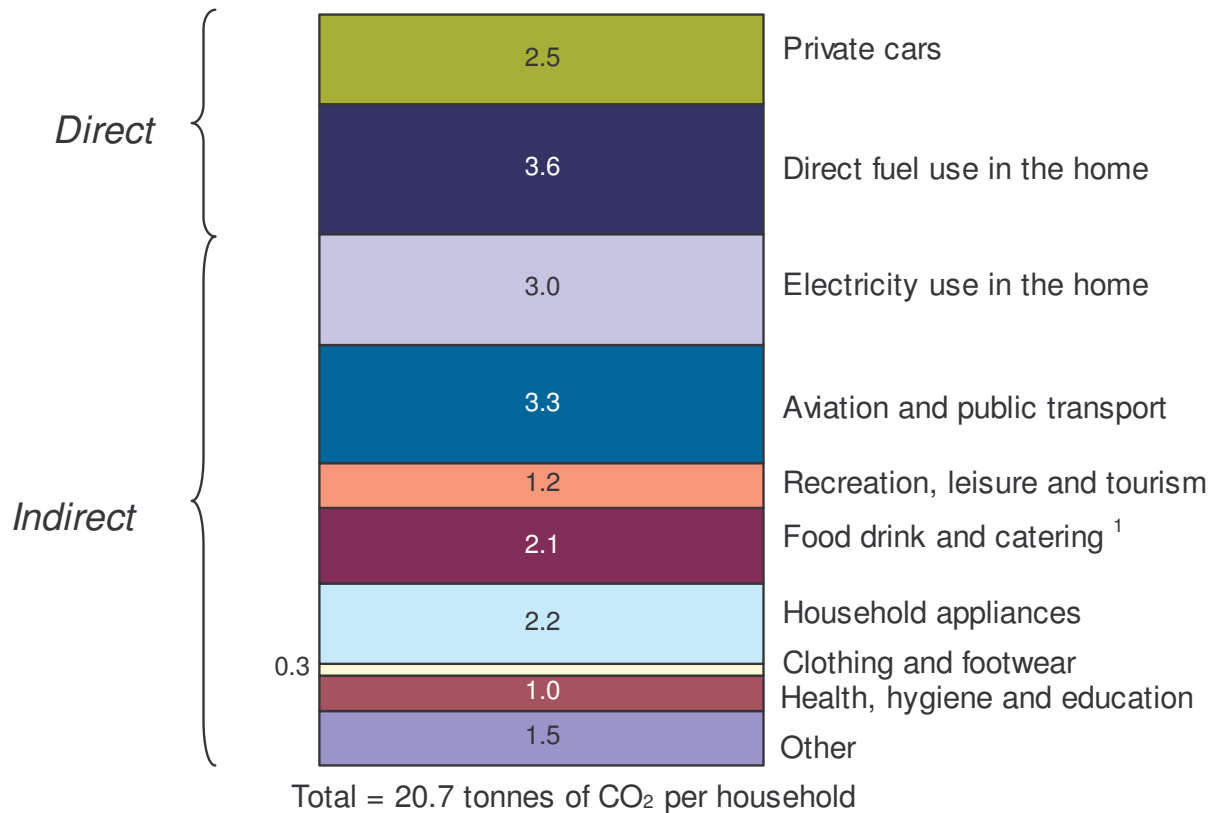


- Provides initial evidence to support choice of products
 - for product roadmaps,
 - to inform Defra's behaviour change goals.

Example evidence: EIPRO (Environmental impacts of Products)



Example evidence: UK Carbon emissions by consumption



Source: ESI, Defra and Stockholm Environment Institute (SEI), York

Dairy Product lifecycle

Energy consumption across chain: Conventional Milk Processing

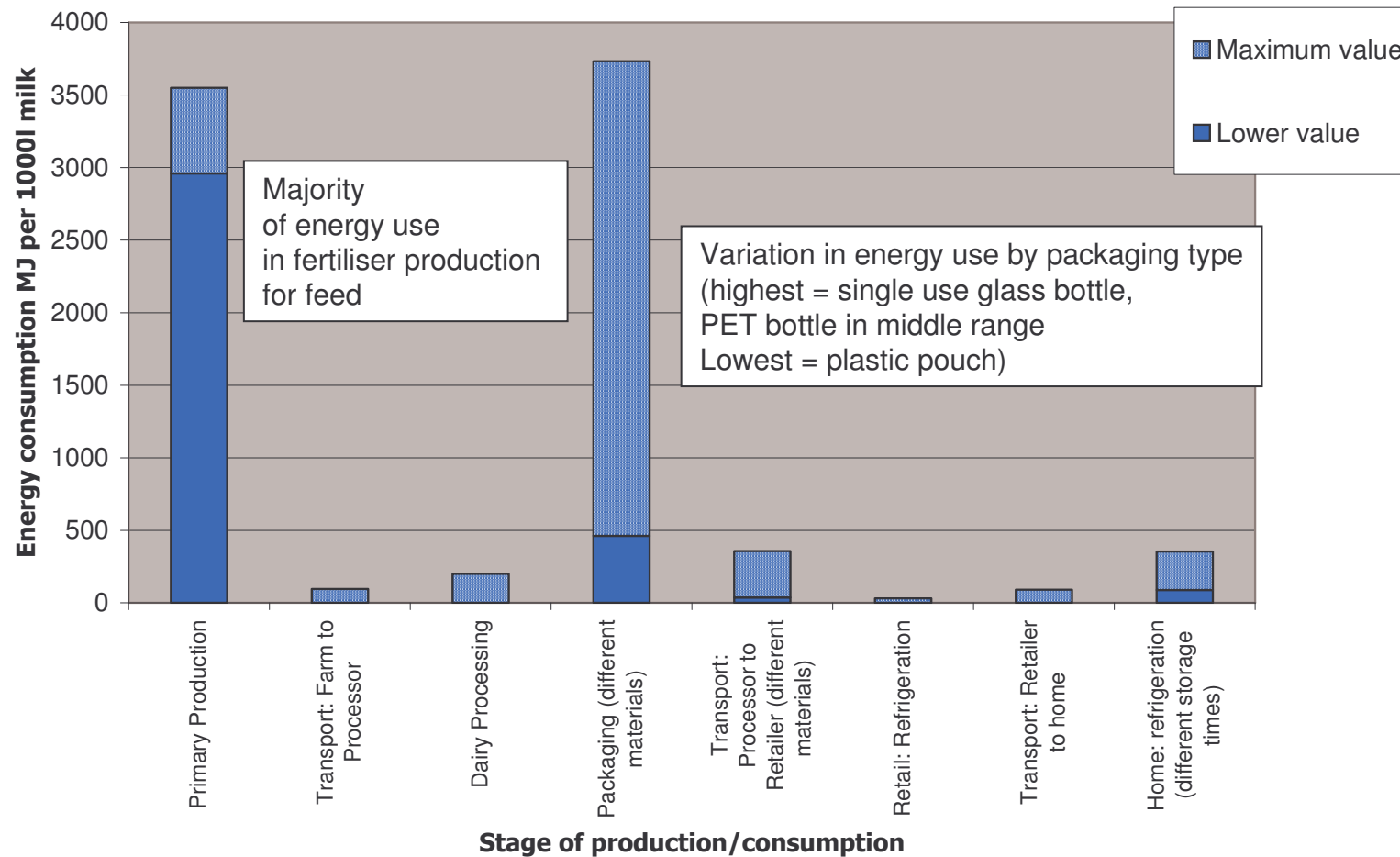
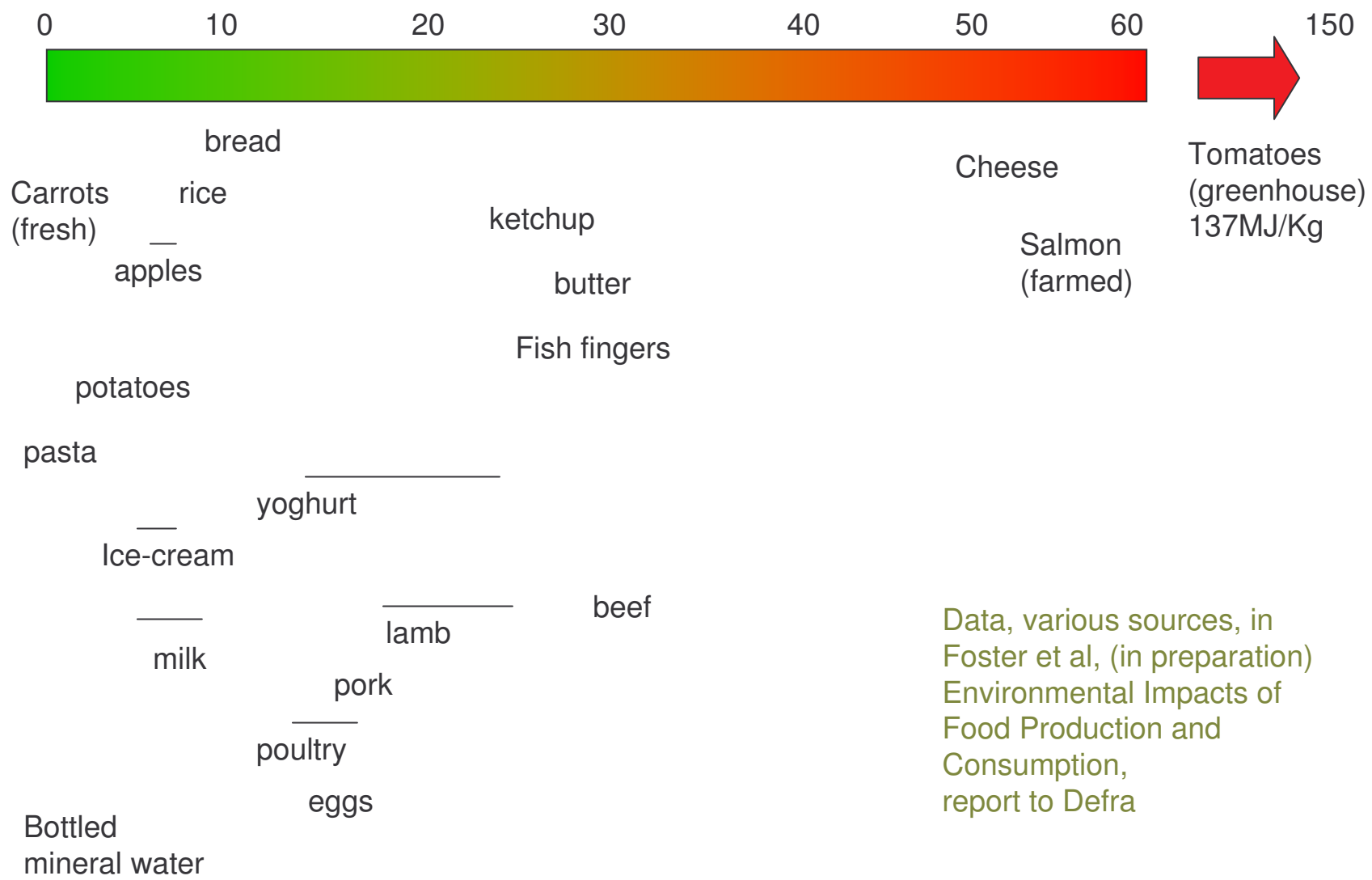


Diagram taken from Foster, 2006, in preparation

Example of data synthesis - The Shopping Trolley report



Data, various sources, in Foster et al, (in preparation) Environmental Impacts of Food Production and Consumption, report to Defra

Further evidence needs

- **Progress towards ‘One Planet Living’/One Planet Economy**
- **Extension of analysis from sectoral to product/service level**
- **Environmental impacts not well covered by current analyses – biodiversity, water, waste etc...**
- **Geographical location**
- **Effective points of intervention in supply chain**
- **UK EIPRO – differences in consumption patterns and impacts?**
- **Informing business engagement**
- **Improving data sources**

Next steps for Defra

OUR AIMS

- To build on SEI project findings and recommendations
- Possible medium term project to develop measurement methods work further and stimulate policy interest and uptake

TODAY.....

- Sharing experiences in measuring SCP at different scales
- Seeking ideas for possible approaches, collaborations, for future work to improve the evidence base:
 - How could Defra contribute to future work
 - Which measurement methods enable robust, timely measurement of production and consumption FOR POLICY?