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# Using Product & Service Roadmaps to Tackle the Throwaway Culture

*Consumers and Choice in a Throwaway Society*  
*02 July, 2007, DTI Conference Centre, London*

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# SUMMARY

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Intro – UK Policy & activities

Focus on priority Products and Services with biggest impacts

- Relevance to Consumer Durables

10 Product & Service Roadmaps

Sustainable Consumption & Production Solutions

Consumer Durables Examples

Links & Contact Details

# UK SCP Policy

## Changing Patterns: UK Government Framework for SCP (2003)



## SCP incorporated in UK Sustainable Development Policy

- SCP is one of the four priority areas for action set out in the UK's Sustainable Development Strategy *Securing the Future* (March 2005)
- One of the five Defra strategic priorities
- *One Planet Economy – Chapter 3 UK Strategy for SCP*

### Vision - a 'one planet economy'

Cleaner, innovative, more efficient **production** processes

Improved environmental performance of **products and services**

Shifts in **consumption patterns** - meeting needs, with lower environmental impacts

# SCP Activities

## 10 Product & Service Roadmaps

- Sustainable Consumption Roundtable Report “I will if you will - towards sustainable consumption”
- Recommended 10 product roadmaps by 2008 for rapid change in priority high-impact products

## Programmes:-

- Business Resource Efficiency & Waste Programme (BREW)
  - Market Transformation Programme (MTP)
- UK Government Business Task Force on SCP
  - (pre Advisory Committee on Products & the Environment (ACCPE))
- DTI Technology Programme
- Sustainable Procurement Task Force
- Direct Gov “Environment and Greener Living” web guide.....



## SCP Activities

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### SCP Evidence Programme (2003 – to date)

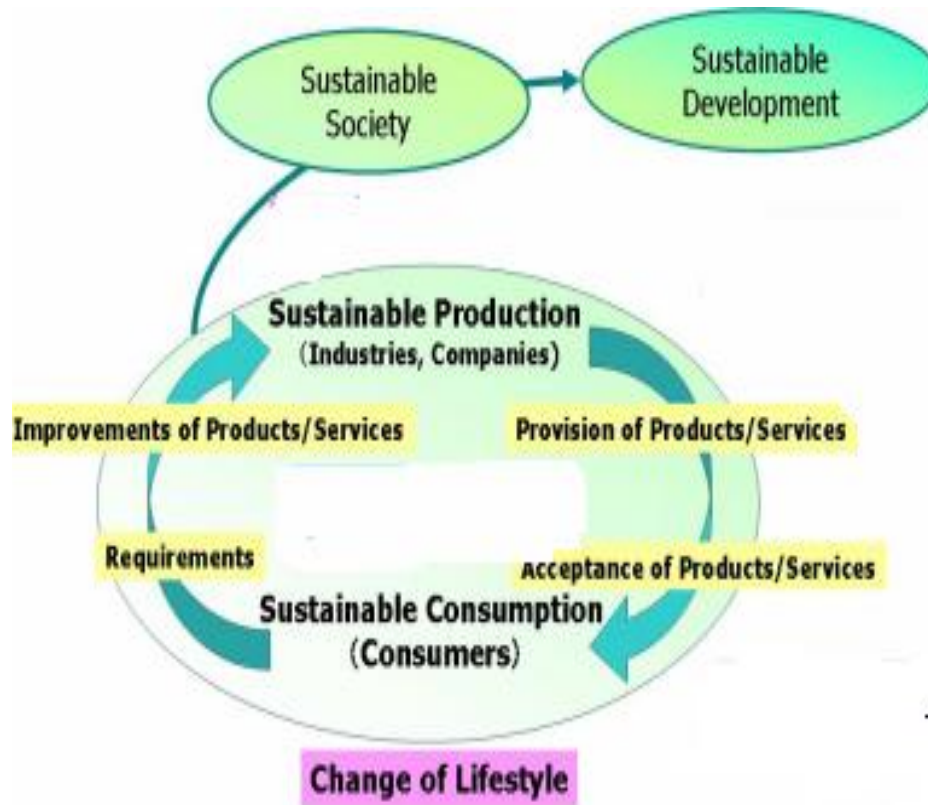
- Sound science inform effective SCP policies

### Themes

- Measuring Production & Consumption Impacts
- Product & Service Environmental Impacts
- Sustainable Consumption & Behaviour Change
- Business & Competitiveness
  - Support tools, technologies & innovation

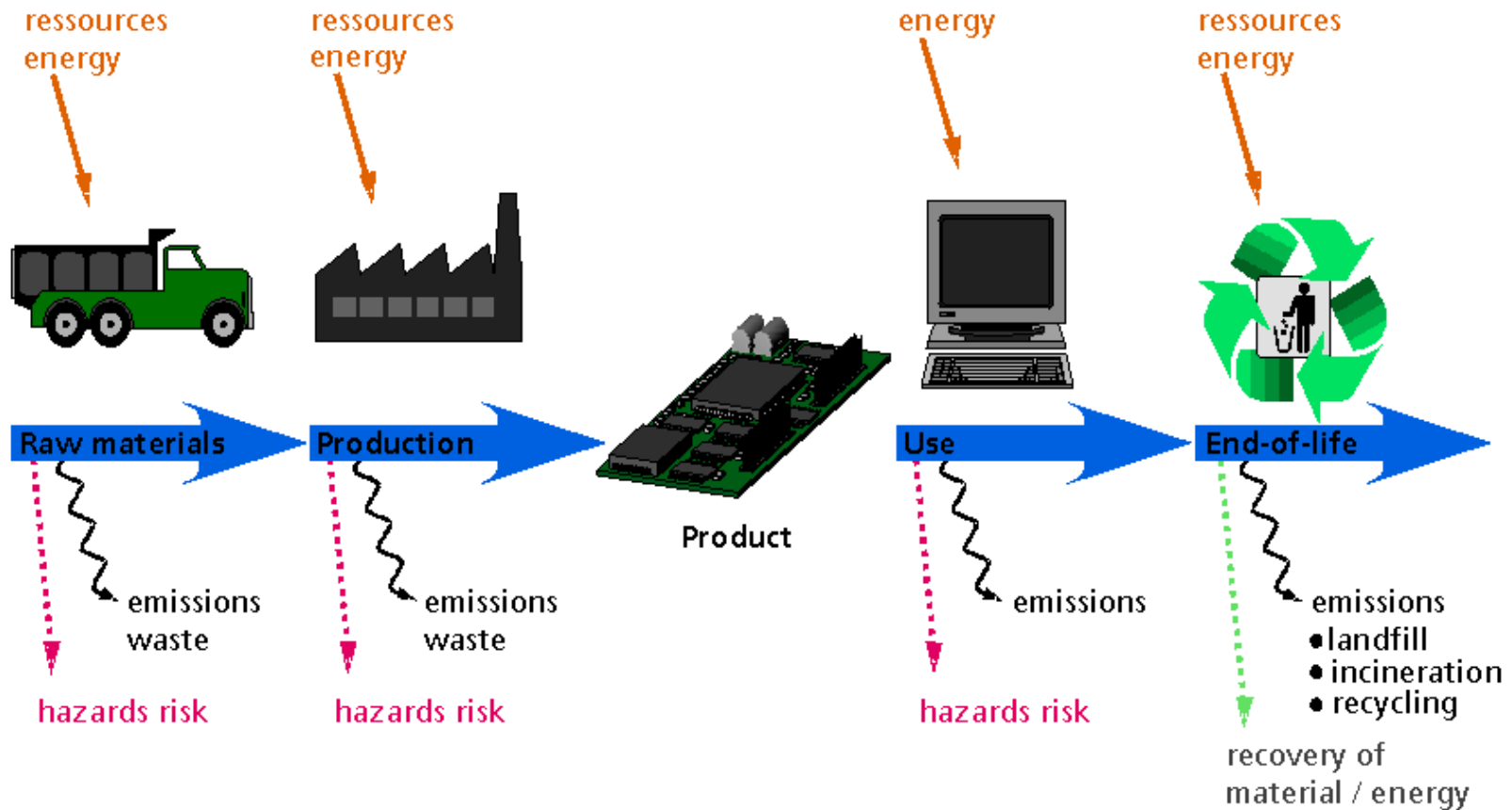
# SCP

Supply

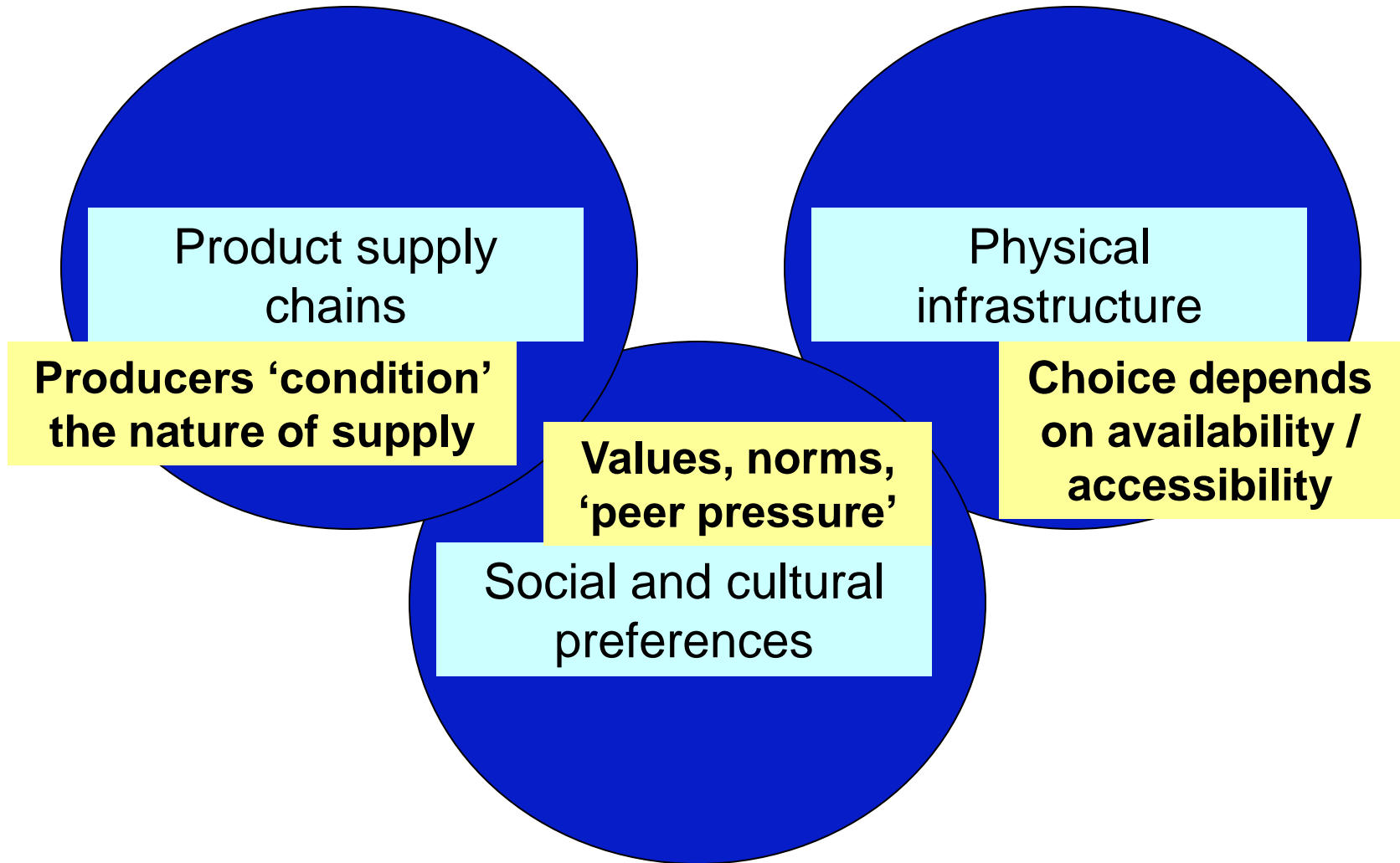


Demand

# Environmental Impacts associated with entire PRODUCT "LIFE CYCLE"



# 'Drivers' of consumption patterns





# An illustration of the problem ...

100g CO<sub>2</sub> / km



Product supply  
chains

... innovate to  
provide choice

400g CO<sub>2</sub> / km



Social and cultural  
preferences

... influence  
the choice

'Retail Parks'

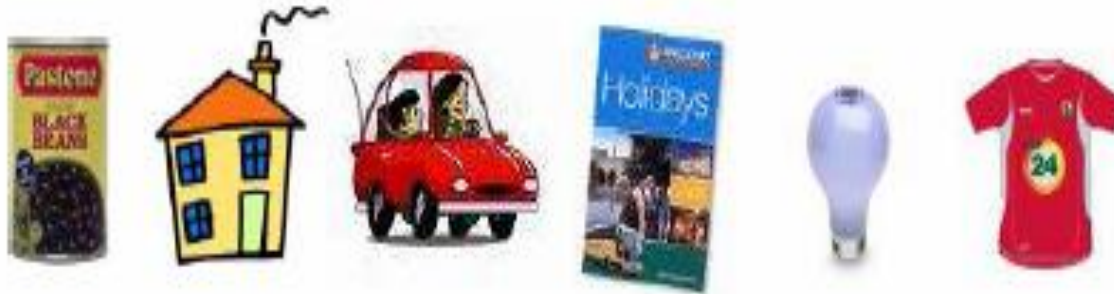


... dictate a 'need'  
for private car

## Global Supply Chains



# EXAMPLES: Biggest Impact Products & Services

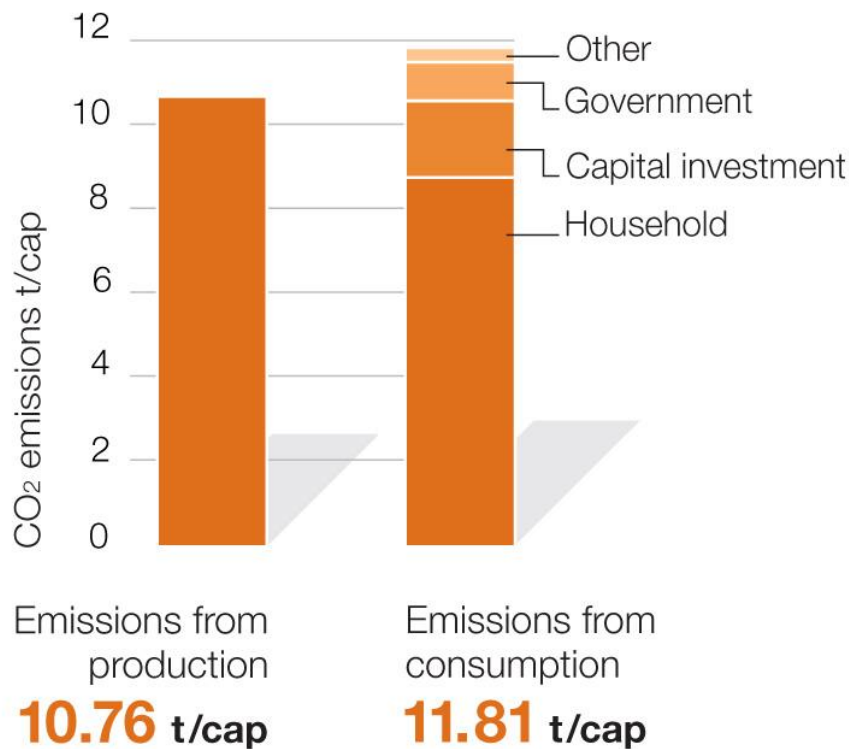


- Evidence – increasing consensus
  - (EIPRO, EEA, WWF, Carbon Trust, Counting Consumption...)

Food & Drink • Dairy (Milk) • Meat , Fish	Transport (e.g. cars, airplanes..)	Buildings (space & water heating & construction)	Energy Using Products
Recreation & Leisure / Tourism	Packaging	Clothing	Chemicals

# UK Consumption

Fig 2 **CO<sub>2</sub> emissions from consumption and production**

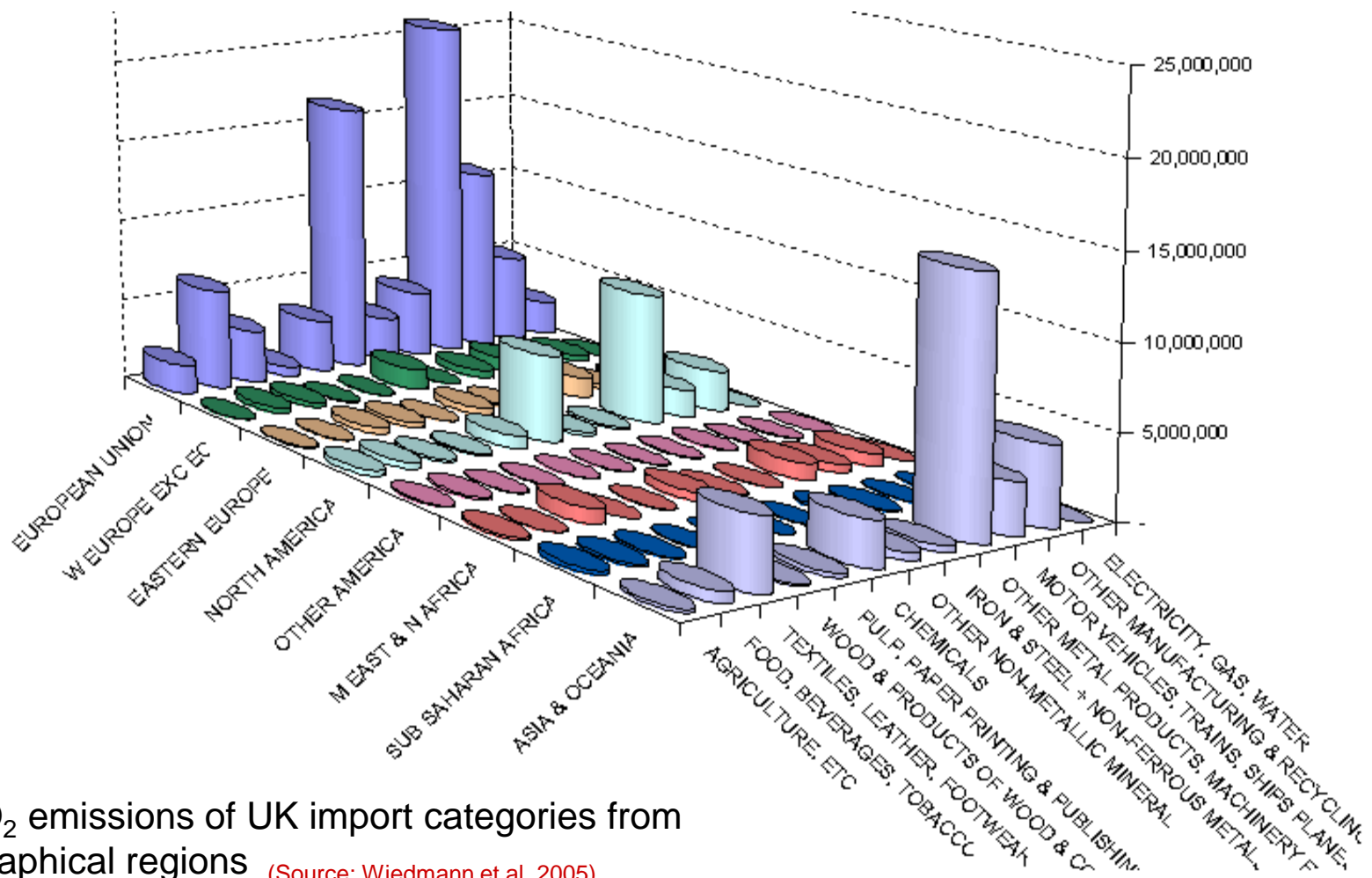


75% associated with Household Consumption

30% of household expenditure triggers 60% of emissions

# Global Impacts

## Products with global supply chains



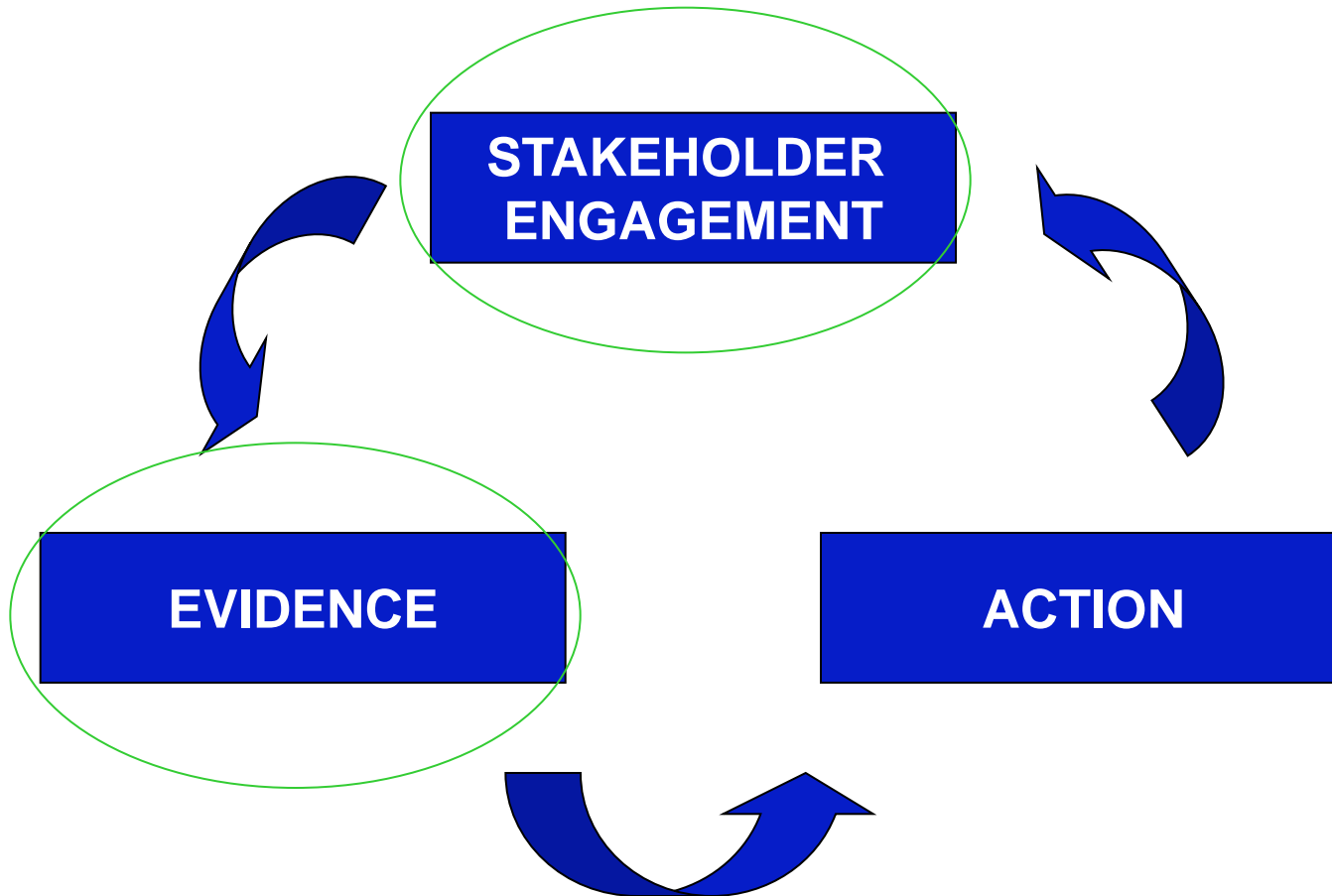
Embedded CO<sub>2</sub> emissions of UK import categories from different geographical regions (Source: Wiedmann et al, 2005)

# DEFRA Product & Service Roadmaps (April 07)

PRIORITY AREA	PRODUCT OR SERVICE
Food	Milk
	Fish
Transport	Passenger cars
Energy Using Products	TVs
	Lighting
	Motors
Buildings	Window systems
	WCs
	Plasterboard
Clothing/Textiles	Clothing

# Roadmap Process

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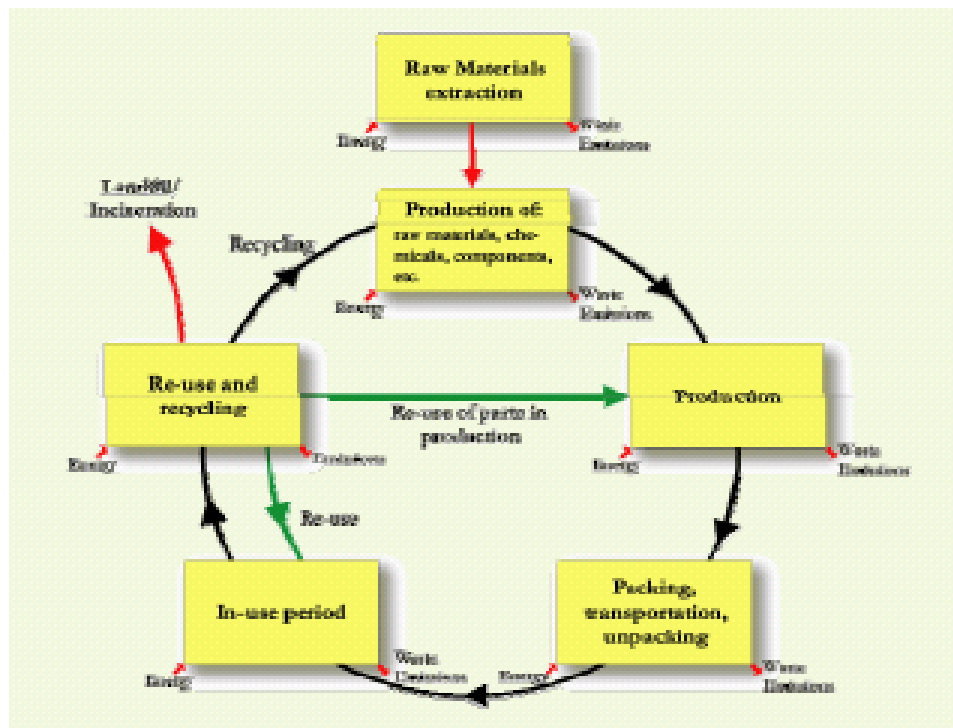
# Product & Service Roadmaps

## Life cycle approach

- Sustainability Impacts

## Interventions

- Policy & Legal
- Market Instruments
- Innovation, Technology

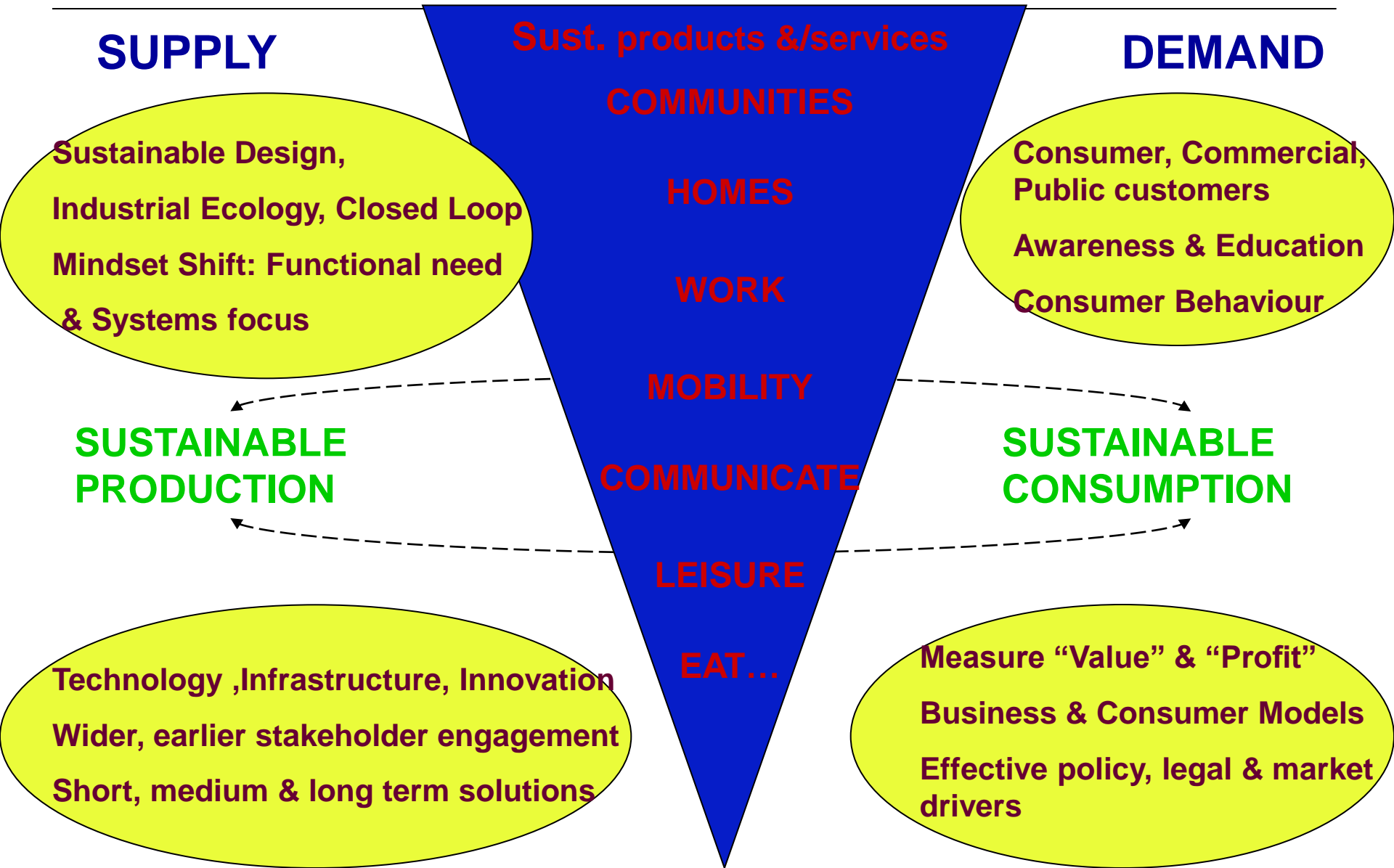


## Opportunities for Improving Sustainability Performance

- Short
- Medium
- Long



# Solutions



# Consumer Durables

## Sustainable Design

## Extended working life

patagonia



## Delivery option (Product Service Systems)

Interface



## Targets

- B2B
- B2C



# LINKS

- **Defra SCP activities**
  - <http://www.defra.gov.uk/environment/business/scp/index.htm>
- **UK government Business Task Force on SCP**
  - <http://www.cpi.cam.ac.uk/scptaskforce/>
- **Market Transformation Programme**
  - <http://www.mtprog.com/>
- **Sustainable Procurement Task Force**
  - <http://www.sustainable-development.gov.uk/government/task-forces/procurement/index.htm>
- **Direct Gov Environment and Greener Living**
  - <http://www.direct.gov.uk/en/Environmentandgreenerliving/index.htm>