

Too much stuff – the impact of consumerism on climate change

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CIE-MAP

Centre for Industrial Energy, Materials and Products

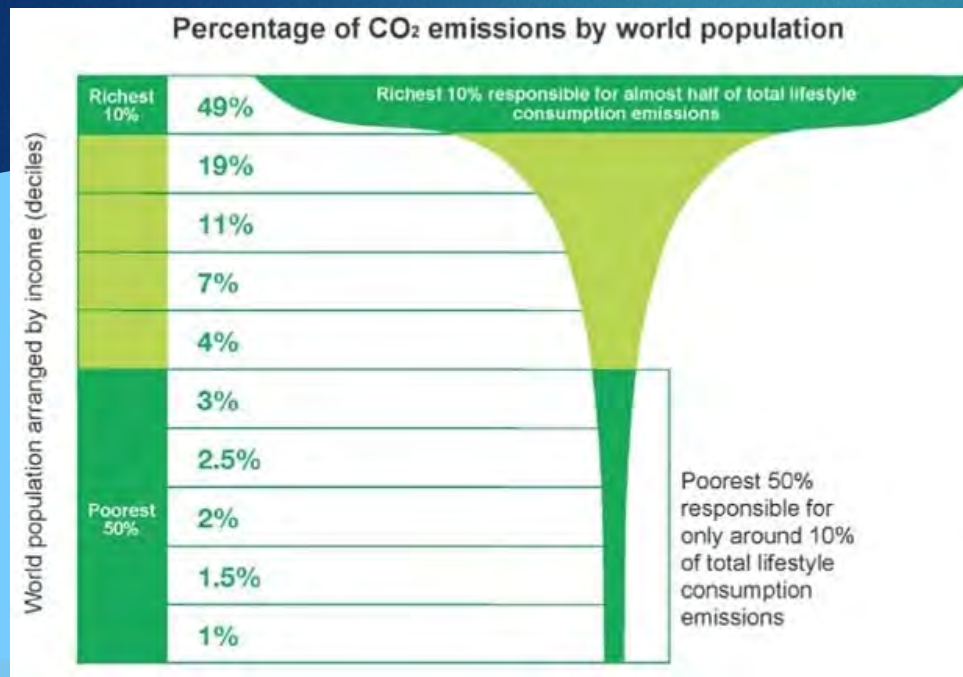
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Too much stuff?



Unsustainable lifestyles on a finite planet

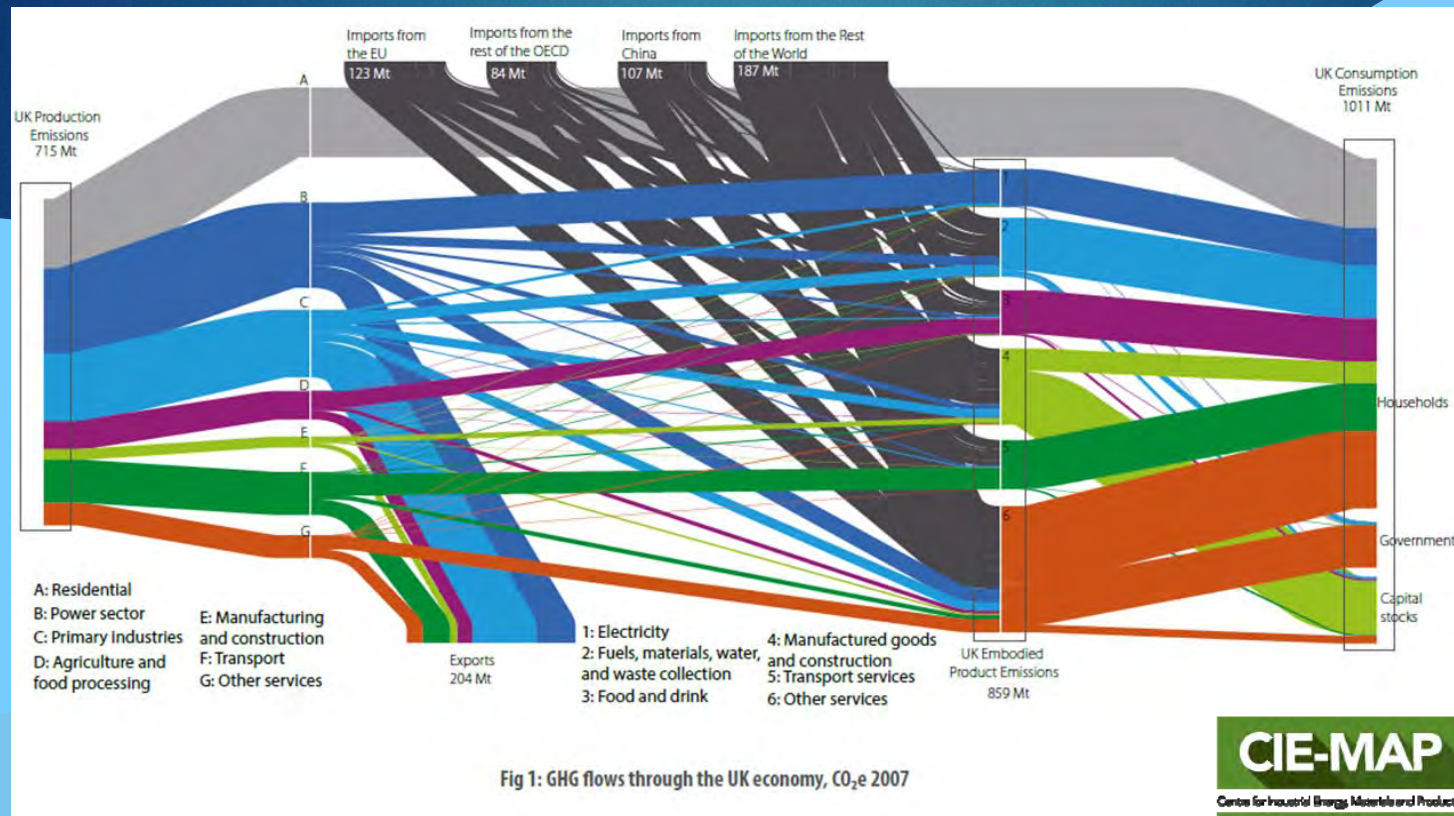


Source: Oxfam



Source: World Wide Fund for Nature

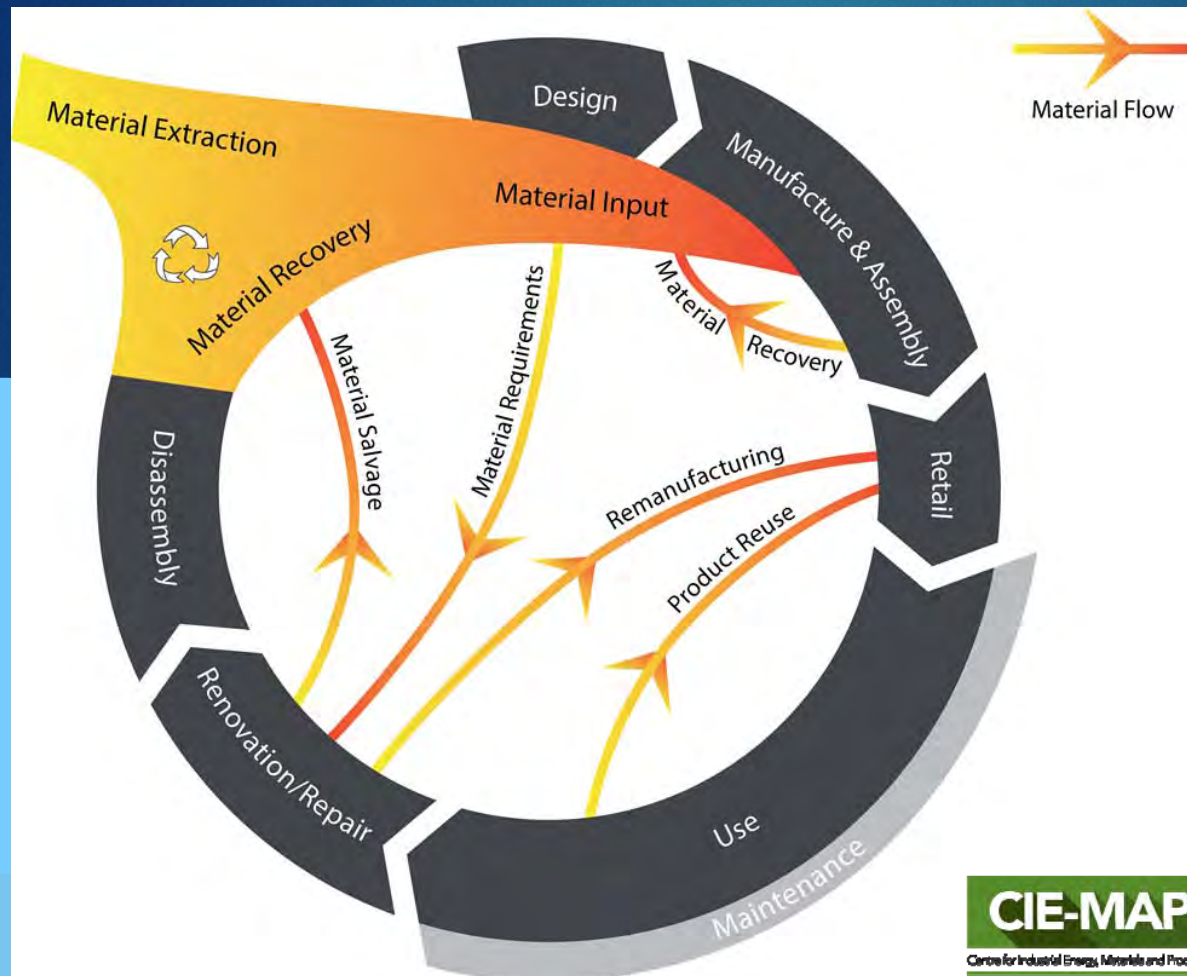
More materials = More emissions



Source:
CIE-MAP 2015

Impacts through the (cotton) life cycle

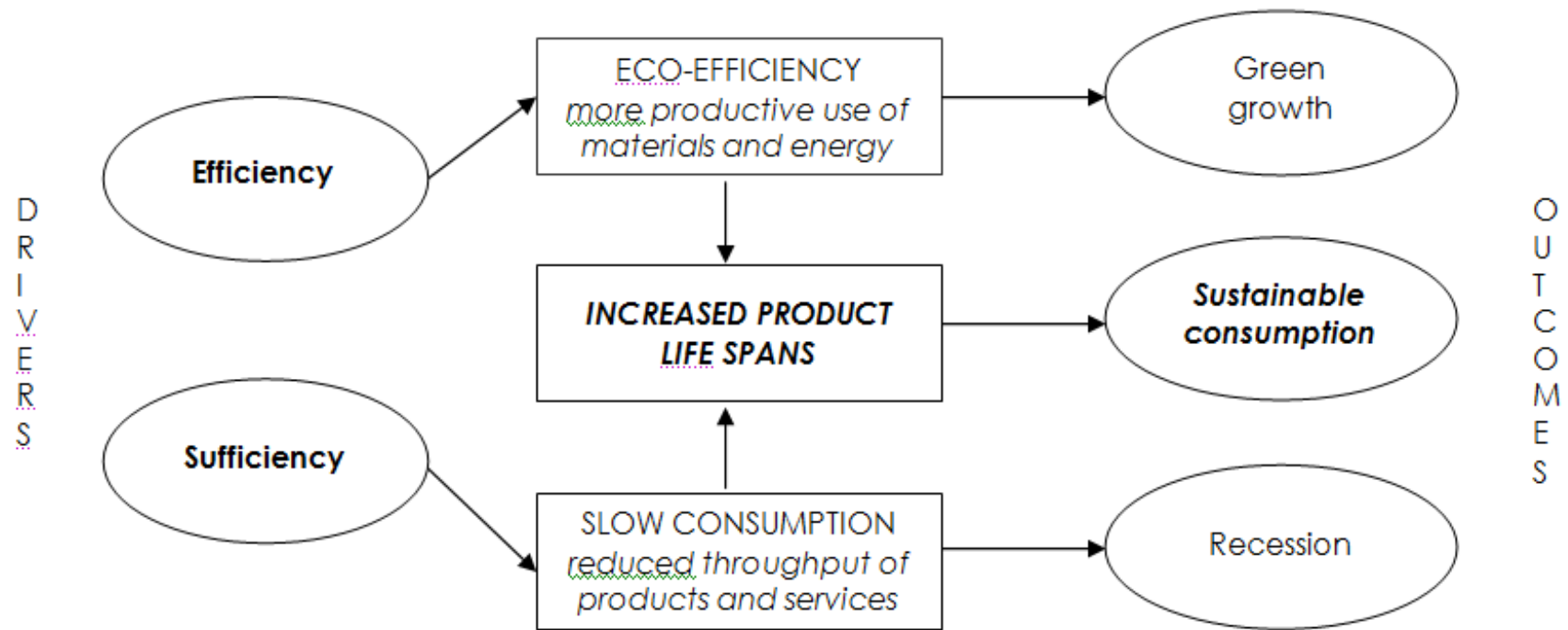




Reducing material flows

Source:
CIE-MAP 2015

Longevity in context



Source: Cooper (2005) *Slower Consumption*

Recent European Union initiatives










Joint Mission Statement

**Sustainable consumption and production:
improving product durability and reparability**

"We live in a disposable society. It's easier to throw things out than to fix them."
— Neil LaBute

The problem

If the rest of the world consumed the way Europeans do, we would need the equivalent of two-and-a-half planets to meet the demand for resources¹. Usable products and device components are scrapped at an alarming rate instead of being salvaged, fixed, and reused. By 2050, our level of consumption of minerals, fossil fuels and biomass will reach 140 billion tonnes, over double the current amount.²



Products must be durable, easy and affordable to repair, and information on these aspects clearly available to consumers. Half the respondents to a recent EU survey said they decided against repairing a faulty product in the past 12 months because repair costs were too high. 92% agreed that the lifespan of products available on the market should be indicated³.

As one of the fastest growing sectors, electric and electronic products are the first candidates for increased repair and longevity — but the principles could equally be applied to textiles, furniture and



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Circular Economy Package: "Still A Long Way To Go"

Posted on 3 December 2015 by Darrel Moore

The European Commission yesterday (2 December) announced the adoption of its long-awaited Circular Economy Package 2.0. With arguably weaker recycling targets than its predecessor and a ban on landfilling separated waste, just what does the resources and waste industry have to say about it?

A few of the headline measures in the new Package include a common EU target for recycling 65% of municipal waste by 2030 and a target for recycling 75% of packaging waste. It will also see a binding target to reduce landfill to maximum of 10% of all waste by 2030 and a ban on landfilling of separately collected waste.

Targets

On the face of it the recycling targets appear weaker than the first proposed Package, which included a 70% recycling target for municipal waste by 2030 and an 80% recycling target for



MOST POPULAR

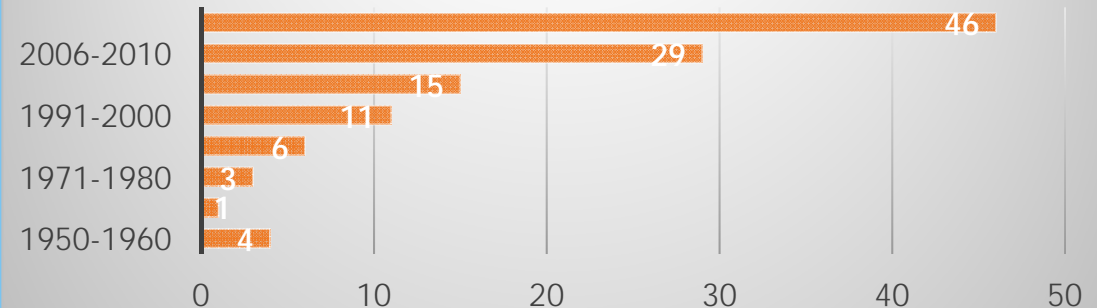
-  Circular Economy Package: "Still A Long Way To Go"
-  England Urged To Improve Recycling Performance
-  Viridor Secures 25-Year Welsh Residual Waste Deal
-  Triple Prosecution in Bid To Stub Out Cigarette Litter
-  Sainsbury's Awards Swadincote £1m To Become Waste Pioneers





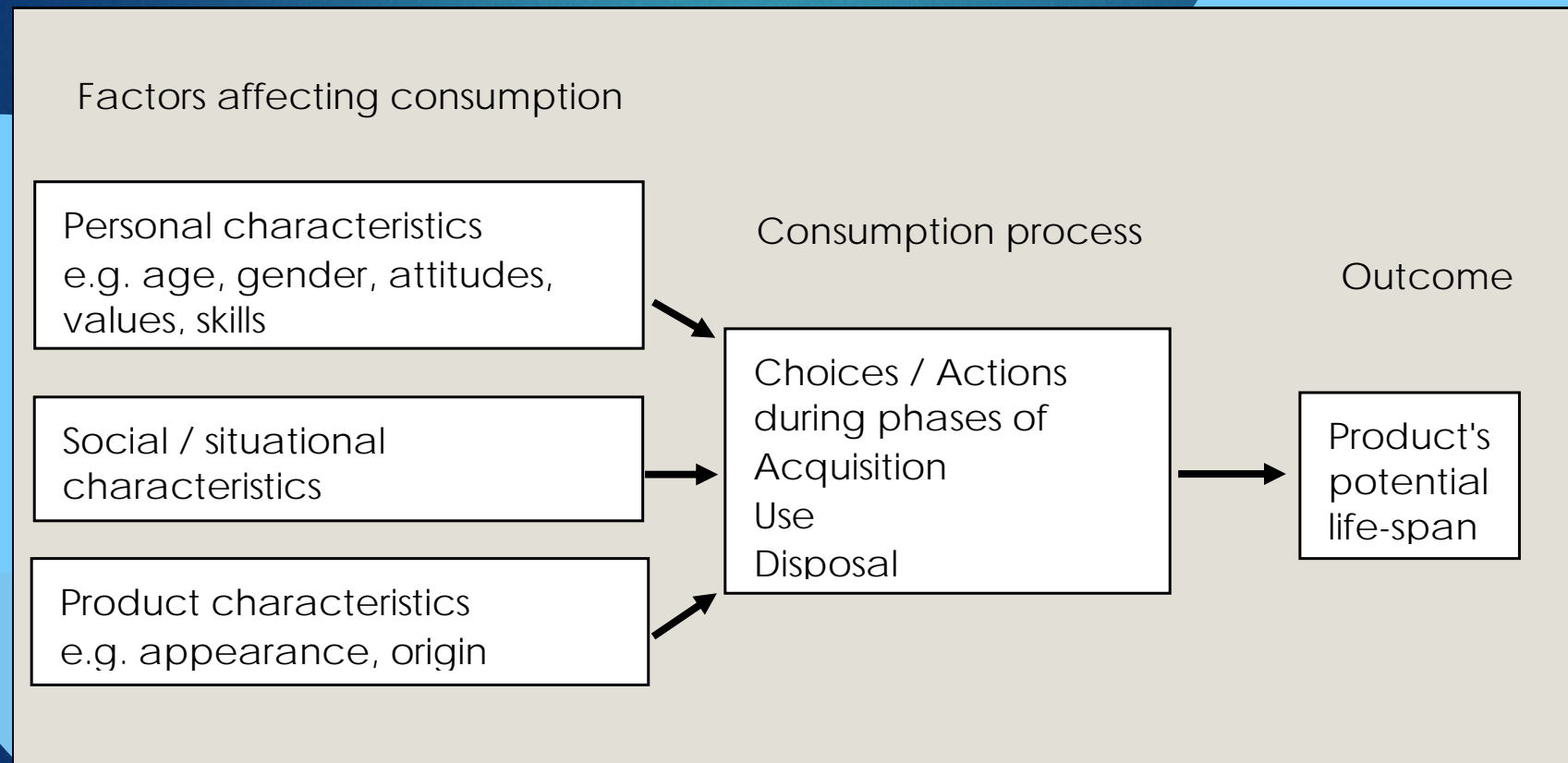
Publications on product lifetimes

Number of publications since 1950*



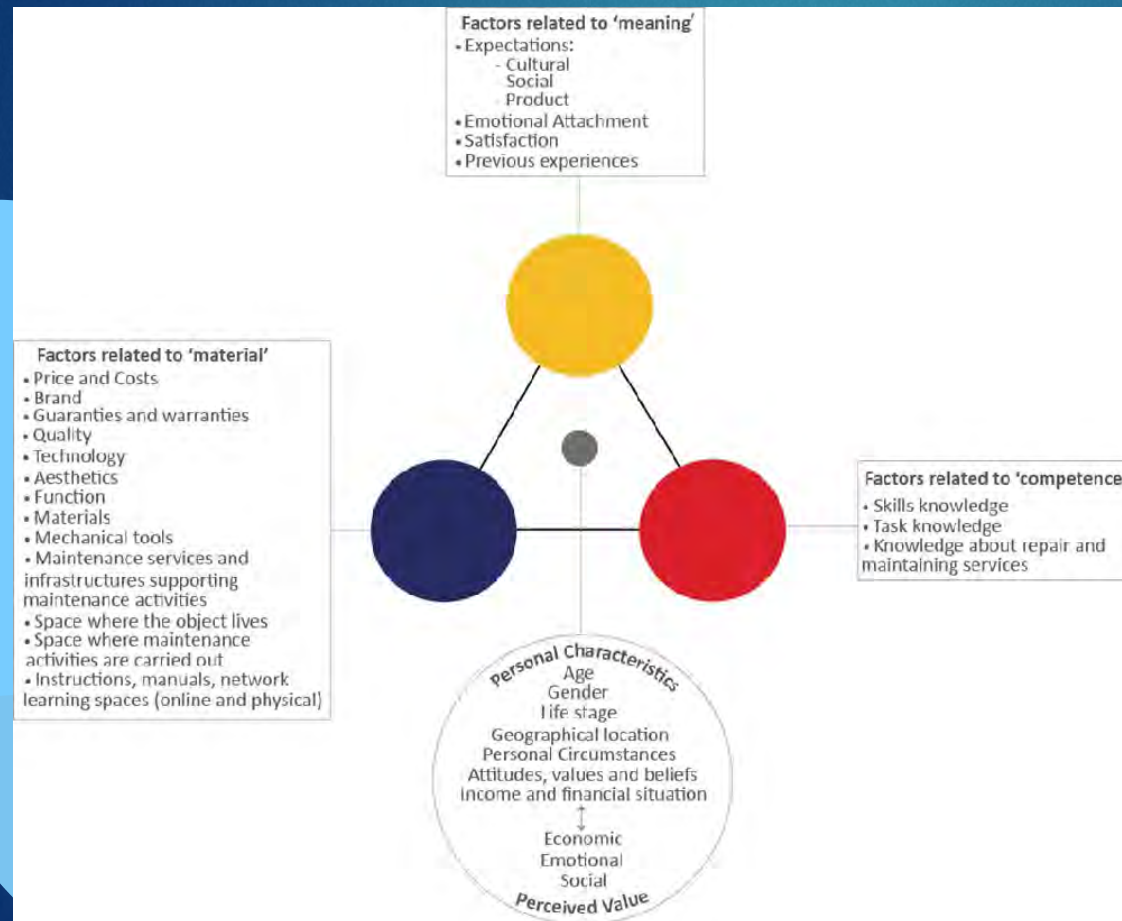
Source: Cooper, Braithwaite, Moreno and Salvia (2016, forthcoming)

Consumer influences on life-spans



Source: Evans and Cooper, in T. Cooper (ed) (2010) *Longer Lasting Products*

Understanding consumers' behaviour



Source: Piscicelli, Cooper et al. (2015)

Case 1: Clothing



Emissions and clothing longevity

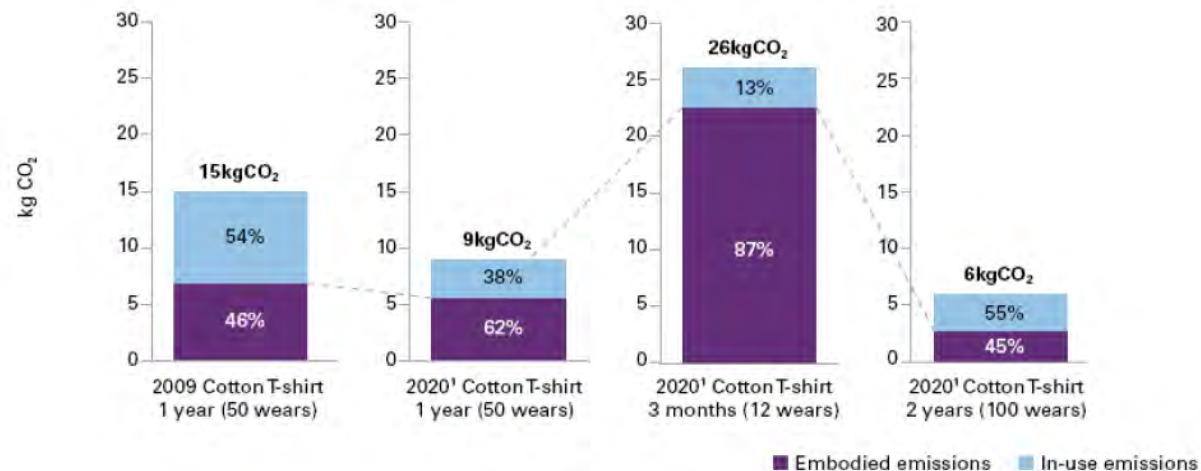


International Carbon Flows

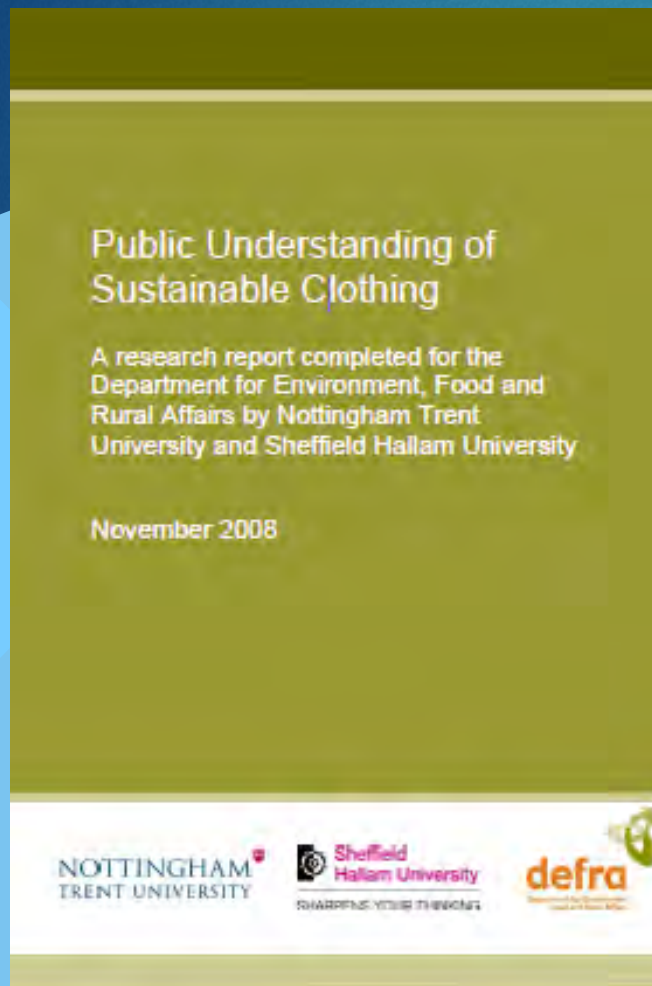
Clothing

Estimates of future life cycle emissions from clothing vary widely with assumptions of longevity

Annual CO₂ emissions associated with wearing and washing a t-shirt once per week, and purchasing a new t-shirt after its maximum use



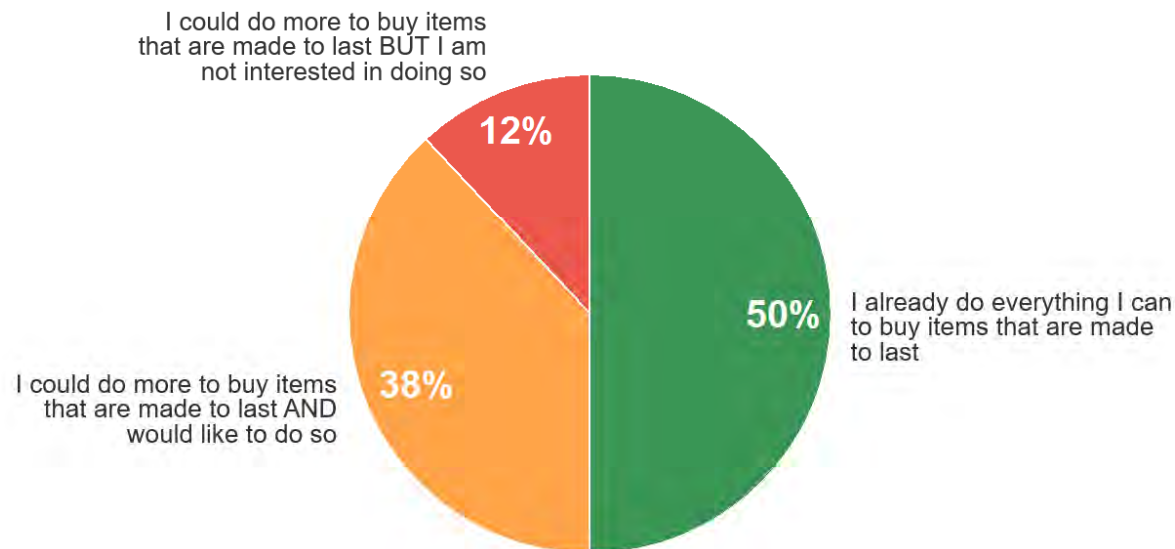
Clothing studies for Defra and WRAP



Consumers' willingness to change

Clothing longevity

Which of the following best describes your view about buying clothes that are made to last and look good for longer?



Ipsos MORI

Base: UK adults who buy clothes (7,690), 7-20 December 2011



Electrical and electronic waste

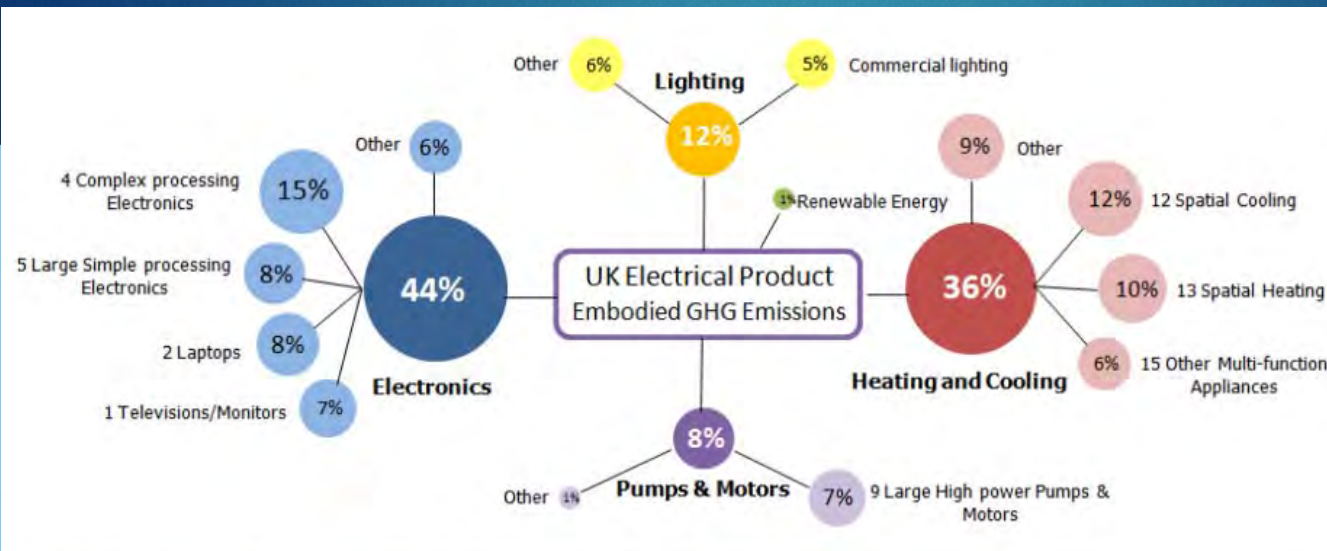
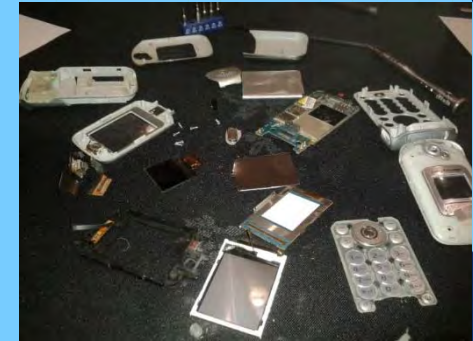
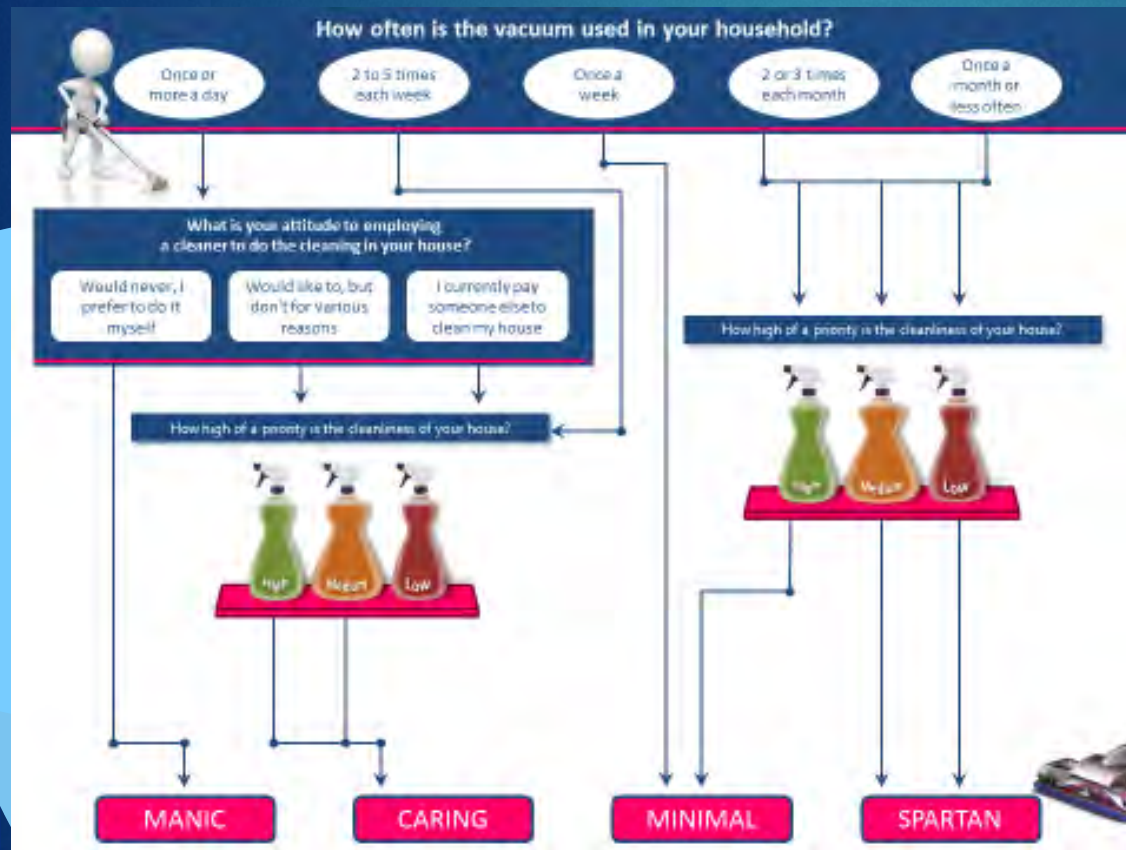


Figure (ii) Embodied GHG footprint for selected major EPs sold in the UK

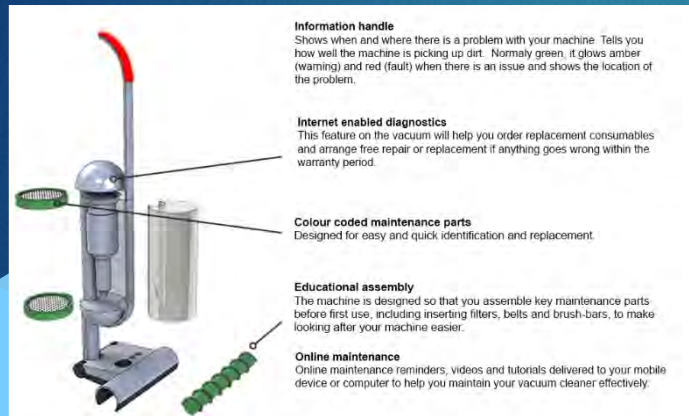
Source: Product Sustainability Forum (WRAP) (2012)



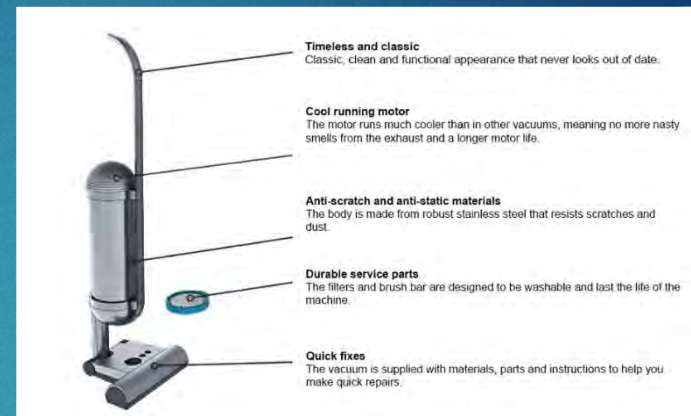
Case 2: Vacuum cleaners



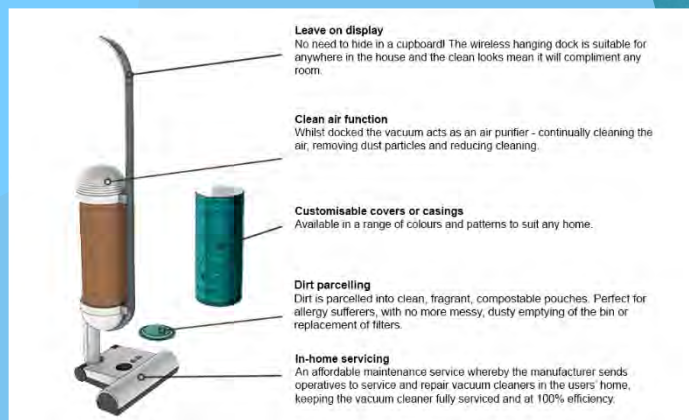
Longer lasting vacuum cleaners - Design outcomes



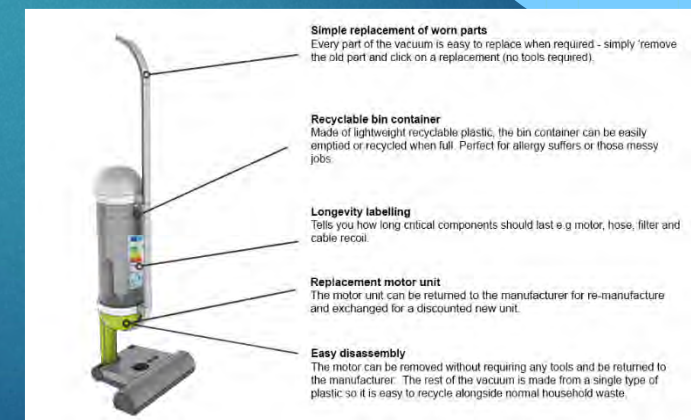
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PLATE Conference 2015

Nottingham UK, 17-19 June 2015

Nottingham Trent University was pleased to host the first international conference to examine Product Lifetimes and the Environment (PLATE) in the context of sustainability. This groundbreaking event included keynote presentations, discussion, debate and workshops, an exhibition and a gala dinner, held at the historic venue of St. Mary's Church, in the heart of Nottingham's Lace Market.

Conference aims

We reviewed current research on how and why increased product lifetimes have become an important element in resource efficiency, waste reduction and low carbon strategies for sustainability.

Academic researchers, industry representatives and policy stakeholders shared knowledge and experience on the influence that product longevity has on environmental, economic and social sustainability.

Conference themes

Contact us

📍 PLATE conference
Maudslay Building
Nottingham Trent University
Burton Street
Nottingham
NG1 4BU

✉ [Email us](#)

Thanks all for coming! @PLATE2015 team is very pleased with the final result.

- 110 participants from 16 countries
- 66 accepted papers
- Public exhibition with 42 exhibits

Contact details

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