



EPSRC Centre
for Innovative
Manufacturing in
**INDUSTRIAL
SUSTAINABILITY**

Business-led sustainable consumption initiatives – impacts and lessons learned

BASED ON A PAPER PREPARED FOR THE CONSUMPTION-BASED CARBON ACCOUNTING (CARBON-CAP) PROJECT, 7-8 OCTOBER 2014, CAMBRIDGE, UK
THESE SLIDES WERE USED AS VISUAL AIDS ACCOMPANYING AN ORAL PRESENTATION AND PAPER AND AS SUCH ARE NOT A COMPLETE RECORD OF THE PRESENTATION.

PRESENTED TO
Carbon-CAP project

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Problem

- Current global consumption patterns are unsustainable (IPCC, WBCSD, UNEP..)
- Consumer behaviour covers the aspects of a person's lifestyle in which resources are consumed (IPPR, 2013). It is not easy to rationalise and deconstruct
- *What evidence can be found on the effectiveness of businesses in running consumer-based environmental programmes? What are the lessons learned from key cases?*

Research sample: company cases

- Marks & Spencer – Plan A & Shwopping
- Unilever – Sustainable Living Plan
- Airbnb – Sharing business model
- Zipcar – Car club model



- Vitsoe – Against obsolescence
- Patagonia – Reuse, Reduce, Repair, Recycle, Reimagine



Marks & Spencer

- Plan A – Doing the right thing - 100 sustainability commitments
- Shwopping – customers are urged to bring back unwanted clothes to M&S stores when buying something new
- Average annual UK garment waste : 1bn items per year
- M&S target: recover 350 million garments; as much as it sells
- M&S recovered 7.8 million garments since 2012 and donated £ 5.5 million to Oxfam
- This is a lot, but but only equates to $\pm 2\%$ of its shwopping target
- Projects are ongoing to drive garment recovery

Source: Plan A website

Marks & Spencer

	“Informing”	“Positively-directing”	“Negatively-directing”	“Forcing”
Individual context	Plan A – “Doing the Right Thing” Shwopping – explain buy one, give one	Discount vouchers Empowering M&S employees		
Social context		Celebrities who shwop Oxfam – collaboration to boost success Recurring wardrobe clear-out days		
Political, Economic, Social, Technologic, Environmental context	Environmental impact reduction as main concern	Profits going to charity as positive, social incentive		

Source: Plan A website; framework: Bocken & Allwood (2012)

Unilever

- Sustainable Living Plan – decouple business growth from environmental impact while increasing positive social impact
- Two thirds of their value chain greenhouse gas impact and 85% of their water footprint originate from consumer use: primarily heated water for showering and bathing
- Unilever's greenhouse gas footprint impact per consumer use has increased by around 5% since 2010
- Laundry: 10% more washes are done at 30°C or lower in Europe (2008-2011; from 29 to 32%)
- Shower behaviour: effects of campaigns yet unclear, except success in promotional pack sales (e.g. efficient shower head)
- Palm oil: whereas 100% is RSPO certified, only 4% is purchased from certified traceable sources (2013)

Unilever

	“Informing”	“Positively-directing”	“Negatively-directing”	“Forcing”
Individual context	<p><i>Inform/ make people understand</i></p> <p>Messaging with brands: Shorter showers save money and the environment</p>	<p><i>Reward</i></p> <p><i>Make it easy</i></p> <p><i>Make it desirable</i></p> <p>Product innovations</p> <p>Product promotions</p> <p>Joint promotions in stores</p> <p>Choice editing</p>		
Social context		<p><i>Make it a habit</i></p> <p>Normalising shorter laundry cycles through collaboration with A.I.S.E.</p>		
Political, Economic, Social, Technologic, Environmental context		<p>Joined the A.I.S.E. to tackle laundry detergent use</p> <p>Joined the RSPO to tackle sustainable palm oil</p>		

Airbnb

- Airbnb was founded in August of 2008 in San Francisco
- It creates local travel experiences, through home sharing in over 35,000 cities and 190 countries and is growing rapidly
- Created and dominates a new segment: private homeowners use its platform to list and collect payments for their rooms and houses, with apps and peer-to-peer feedback (Lunden, 2014).

	# of rooms	Age
Airbnb	500,000	6
Couchsurfing	1,200,000	10
IHG	645,000	>60
Accor	500,000	>40
Hilton	600,000	>90

Source: Chase (2012) Greenbiz presentation; Lunden (2014)

Airbnb and sustainability

- In Europe, Airbnb guests use nearly 80 per cent less energy than hotel guests
- Airbnb guests in Europe saved the equivalent of 1,100 Olympic-sized pools of water while avoiding the greenhouse gas emissions equivalent to 200,000 cars on European roads in one year.
- Airbnb guests are up to 15 per cent more likely to use public transportation, walk or bicycle as their main mode of transportation than if they had stayed at a hotel.
- Less than half of Airbnb hosts in Europe provide single-use toiletries for their guests, reducing waste.
- But... does it lead to more travel?

Source: Airbnb website; Cleantech Group survey

Airbnb

	“Informing”	“Positively-directing”	“Negatively-directing”	“Forcing”
Individual context		Messages for hosts: “Sharing your home pays the bills; Sharing your home is fun”		
Social context		Peer to peer review platform, insurance for homeowners, and Paypal payments makes AirBnB easy to use and safe		
Political, Economic, Social, Technologic, Environmental context		AirBnB could be successful in the economic downturn – making homes affordable for hosts and holidays affordable for guests	AirBnB has been criticized for breaking laws and avoiding strict rules that apply to hotels (e.g. tourist tax)	Although popular and growing, AirBnB has been banned (partially) in some geographical areas

Source: Airbnb website; framework: Bocken & Allwood (2012)

Zipcar

650,000 +	Users
9000 +	Cars and car parking spots
500,000,000	Liters of petrol saved
1.16	Million tons of CO2 saved
40%	Sold their car or did not buy new

- But... what does the car fleet look like?

Zipcar

	“Informing”	“Positively-directing”	“Negatively-directing”	“Forcing”
Individual context	Its website includes seven reasons for individuals to join Zipcar, only one being associated with the environment, showing the additional benefits of car sharing			
Social context		Making car sharing available everywhere through the same Zipcar brand helps normalise sharing		
Political, Economic, Social, Technologic, Environmental context		Proving the concept of car sharing helps pave the way for other sharing platforms		

Source: Zipcar website; framework: Bocken & Allwood (2012)

Vitsoe and Patagonia

- Campaigns and advertisements:
 - “Don’t buy this jacket” (Patagonia)
 - “Against planned obsolescence” (Vitsoe)
- Repair, reuse, recycle
- Timeless design
- New compatible with old

- But ... :
 - Premium brands
 - Year-on-year increases in sales/ growth

Conclusions & points for discussion

What evidence can be found on the effectiveness of businesses running consumer-based environmental programmes? What are the lessons learned from key cases?

- All cases have emerged without regulatory pushes
- Corporate action is happening but delivers a fraction of what is required to mitigate climate change
- There is no clear evidence on stepwise change and absolute reductions yet across the cases
- Most companies seem to deliver 'sustainable consumption' through increases in product/ service sales – a paradox?
- What should come next? Product bans; 'daily carbon intake'?



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Questions?

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