DISPELLING THE MYTHS ABOUT CONSUMPTION BEHAVIOUR

Kate Power¹, Oksana Mont²

¹European Topic Centre on Sustainable Consumption and Production, Højbro Plads 4, 1200 Copenhagen, Denmark. Email: kapow@etc.mim.dk. Tel: +45 72 54 61 66.

² International Institute for Industrial Environmental Economics, Lund, Sweden

Abstract

It has been acknowledged that the shift to more sustainable consumption patterns and levels is a complex task that requires the involvement of multiple societal actors and clear visions of more sustainable lifestyles. In addition to the complex nature of the problem and the diversity of interest of different actors with regard to their role in facilitating the change, there are also a number of myths that characterise the mainstream discourse on sustainable consumption especially in policy circles. Holding on to these myths prevents policy makers from seeing the real situation and from effectively addressing the sustainability challenges. In this paper we provide evidence that dispels these myths, and we hope this could help policy makers in developing more effective change strategies, rather than falling back on 'raising awareness' and other popular, but ineffective tools.

Keywords

Consumer behaviour, myths, change strategies, sustainable consumption and lifestyles.

Introduction

Levels of material consumption continue to increase in Europe, and the global consumer class continues to grow as people in developing nations use their increasing purchasing power to emulate Western consumption patterns. We need to move away from the traditional ways of thinking about consumption – either that the social system and structures largely determine the actions of individuals, or that society is the sum of individuals acting independently. Understanding the forces that influence and shape consumption is an incredibly complicated task. There are several myths that characterize the mainstream discourse on sustainable consumption especially in policy circles. Holding on to these myths makes traditional policy to focus on efficient production, greening the markets and providing environmental information to population, leaving consumption levels to preferences of individuals and hoping that "raising awareness" will change the paradigm of over-

consumption and throw-away mentality without substantially changing the prevailing economic principles. The myths thus prevent policy makers from seeing the complexity of the real situation, the futility of the half-measures advocated by the majority of countries and from effectively addressing the sustainability challenges. In this paper we aim to dispel seven myths that have penetrated the sustainability discourse with regard to consumption in the last decade.

Each section starts by discussing the origins of each myth. Then consequences of the myth on society, consumption patterns and levels, actors and policy actions are presented. After that arguments and data that dispel each myth are provided and implications for policy strategies are outlined.

Myth 1: More information leads to sustainable behaviour

One of the most dominant myths that laid grounds for many policy instruments in recent decades is that if consumers had more information they would make the "right" choices and would choose to behave and live more sustainably.

This myth stems from an economic understanding of human behaviour, according to which people are viewed as primarily economic beings, and individual behaviour is understood as a process of conscious and rational decision-making (Rational Choice Model), based on assessing costs and benefits and then choosing the option with the highest expected net benefit or lowest expected net cost.

Consequences of the myth

The Rational Choice Model led to the perception that it is our attitudes that inform our behaviour (Balderjahn 1988; Ronis, Yates et al. 1989; Luzar and Cosse 1998) – and this in turn forms the belief that if we can change people's attitudes (through information provision) this will lead to a change in their behaviour. A range of consumption-oriented policies or policy instruments have been developed based on these assumptions. The majority of them focus on adjusting for market failures by providing more accurate information to consumers (e.g. ecolabelling and awareness raising campaigns) and by correcting prices (internalisation of environmental and social costs or Ecological Tax Reform (EEA 2009). Policy interventions based on this myth are favoured due to being relatively cheap and simple (especially information campaigns), and relatively uncontroversial for businesses and the public. This type of intervention perpetuates the idea that sustainable consumption is most appropriately tackled through individuals making different choices, rather than through institutional and infrastructural changes and leadership from governments or businesses.

Dispelling the myth

This myth has been widely criticised on several accounts:

- 1. Decision-making is not only rational: emotions and habits also play a role.
- 2. Although we implement choices individually, decision-making is strongly influenced by the social context and collective norms, thus consumption must be analysed at the group and societal levels as well as individual level.
- 3. People do not make all decisions based on self-interest alone; our behaviour may be driven by altruism or other motivations.
- 4. People's attitudes are not always consistent with their behaviour: this is known as the "Attitude Behaviour Gap" or "Values Action Gap".

Although people are relatively rational beings, their decision-making is affected by emotions and habits as demonstrated by a long history of studies (Gronow and Warde 2001; Belk, Ger et al. 2003), (Bourdieu 1984; Laverie, Kleine et al. 1993; Richins 1997; Mick and Fournier 1998; Schor 2004).

The individual is undoubtedly an important actor in creating sustainable society. However, overreliance on the power of individuals may lead to poor results since our behaviour is also greatly influenced by the context we find ourselves in, particularly the social norms around us and the infrastructure we live and work in (Rubik, Scholl et al. 2009: 35). Interdisciplinary study of the factors that influence consumer behaviour, see e.g. (Mont and Power 2010; Power and Mont 2010) show that our actions and decisions are shaped by a range of economic, political, psychological, technological, social and infrastructural factors. These factors create a complex reality of human interaction with other members of society and with institutions that are deeply rooted in contexts and infrastructures that are largely not conducive to living sustainable lifestyles.

An obvious example to dispute self-interest as the main driving force of consumption is the increasing uptake of Fair Trade products, which may have higher prices to ensure fair working conditions for producers in developing economies and just distribution of profits in supply chains. There is also a reported growing concern in society about social and ethical issues along supply chain, especially with regard to developing countries of supply (Mont and Leire 2008). The role of self-interest is explored further in Myth 7: Appealing to people's self-interest is the path to sustainable behaviour.

Although the attitude-behaviour link is clear in some specific areas, e.g. condom use (Albarracin, Johnson et al. 2001), studies have demonstrated a clear "attitude-behaviour gap" in other areas, e.g. (Godin, Conner et al. 2005). Research on "cognitive dissonance" – when our attitudes / values are inconsistent with our behaviour, shows that it is more

common to adjust attitudes than rectify behaviours (Festinger 1957). "So if you think you're a good and moral person, but you fudge a little on your taxes, you might justify this with an excuse like: 'I've overpaid in previous years'. . . " (Dessler 2007) instead of changing your behaviour. Sociological studies demonstrate, and environmental studies confirm, that provision of information does not necessarily lead to changes in attitudes and even when it does, the change in attitudes does not always translate into behaviour change (Kollmuss and Agyeman 2002).

Policy implications

The realisation that people's actions sometimes contradict their stated attitudes and values is important to keep in mind when reading surveys of public opinion, or thinking about policy interventions: many policies have been based on the rationale of changing people's attitudes in the hope of changing their behaviour. However, people's decisions are to some extent informed by their awareness of environmental issues and knowledge about the role they can play, and so providing this type of information is still important.

What this information should be accompanied with is the vision of more sustainable society, suggestions for more sustainable lifestyles and specific examples of more sustainable solutions that address different domains of individuals' life. This information should be provided in a way that engages and affects people's emotions and that enables people to realise how their habits can be adjusted to accommodate more sustainable ways of living.

In general, studies show that information instruments are more effective when used in combination with other instruments (OECD 2008), such as pricing or infrastructure developments, which create a more effective framework for change for consumers, such as improved infrastructure (e.g. new public transport options) or pricing mechanisms (e.g. free introductory public transport pass).

Information alone will not encourage most people to choose more sustainable lifestyles and therefore, provision of information should not be the only policy tool that addresses unsustainable behaviour. Studies have demonstrated that it is rather pointless to advocate for abolishment of private cars in the absence of a good public transport network or to encourage people to separate waste without adequate local recycling facilities (OECD 2001; Southerton, Chappels et al. 2004). Thus infrastructure and institutional setting need to become conducive to more sustainable living before information can play a more effective role in promoting sustainable lifestyles.

Myth 2: Small environmental actions will have a 'spill-over effect' to bigger changes

Another myth about sustainable consumption is that if people can be encouraged to make easy and small changes in one area, the changes in attitudes and behaviour will spill over to other areas and as a result significant changes in one's lifestyle can be made (Thøgersen 1999).

The myth originates in a commonly tested foot-in-the-door paradigm (Freedman and Fraser 1966), according to which once a person agrees to a small change in their behaviour, they are more likely to accept a bigger or more costly request for pro-social behaviour. This is based on concepts from marketing theory, which encourages us to "start where people are", get them moving in the right direction with an easy action, which should then theoretically make it easier to move up to the next level of behaviour change. Although this sounds perfectly logical, it has been shown to be unsuccessful in encouraging people to take on increasingly challenging sustainable behaviours.

Consequences of the myth

It is believed that if we can persuade individuals to adopt sustainable behaviour in one area, e.g. recycling, they will start identifying themselves as people who care about the environment, and it will be easier to engage them in further, more challenging behaviour changes, e.g. abandoning the car (Crompton and Thøgersen 2009). Belief in this myth tends to perpetuate campaigns of the "10 easy tips for saving the planet" type, which give people a distorted view of the large environmental impacts their consumption decisions can have and the limitations of the simple steps in addressing these significant impacts.

It also gives the opportunity for governments to take rather timid actions towards sustainability without advocating the much needed profound changes in consumption that might currently lack public acceptance or the blessing of industries and private interests.

For businesses the easy and painless actions provide a window for claiming that they are working on sustainability issues without addressing the really challenging questions, such as the promotion of the throw-away society, reduced durability of products and almost non-existent repair possibilities, all of which depend on the model of business profits based on selling more and more material products.

Even for environmental NGOs and CSOs (civil society organisations) this myth provides an opportunity to run "10 easy steps to saving the planet" - type campaigns without needing to draw public attention to much more profound problems that require a very different set of actions than the ones advocated by such campaigns (Crompton and Thøgersen 2009).

So as a result of this myth, everybody wins, but the environment!

Dispelling the myth

The myth has been critiqued with counter-evidence that shows that these "positive spillover" effects are at best exaggerated (Crompton and Thøgersen 2009). Some researchers demonstrate that spill-over effect might occur under certain circumstances, e.g. in a limited number of behaviours or only among a certain segment of population, while others are more sceptical to that especially with regard to environmental behaviour (McKenzie-Mohr, Nemiroff et al. 1995).

The spill-over effect may be successful in some circumstances, mainly when people undertake a sustainable action and then start to identify themselves as a person who cares about the environment and takes positive action (Crompton and Thøgersen 2009; Reynolds 2010). This is much more likely to happen if the suggested action has been framed as "positive for the environment" rather than "saving money" or "being cool" (see more about this in Myth 7). However spill-over effects do not occur with the frequency or certainty that would make them a useful part of a strategy for sustainable behaviour change (Crompton and Thøgersen 2009).

The myth also has the risk that people will feel good about these small, "token" behaviour changes, and use this to justify other behaviours that they know are unsustainable (Downing and Ballantyne 2007). As Crompton and Thørgersen (2009: 18) point out, people tend to do cheap and easy sustainable behaviours before making more difficult and expensive changes (Diekmann and Preisendörfer 1998; Kaiser 1998), which may lead them to justify not taking the more difficult and expensive actions because they feel they have already 'done their bit' – although the actions they took had a relatively minor impact (Van Raaij 1995). This may take the focus from the real lifestyle changes that are needed in order to address the level of problems that we are facing.

Research shows that framing changes in terms of the environmental benefits is more likely to lead to positive spillover than framing in terms of personal gains (Crompton and Thøgersen 2009). This contradicts the traditional marketing approach, which suggests that communications should be targeted according to what different types of people need to hear in order to encourage change, while the values underlying those changes are left unexamined (see more in Myth 7).

Policy implications

Although there is no empirical evidence that supports the idea that small easy steps will lead to more significant sustainable lifestyle changes, the myth remains popular with governments, businesses and civil society organisations – probably because it is much

easier and less controversial to promote small easy changes than ask people to make changes to their lifestyle that they may perceive as "sacrifices". Governments would have to move on from asking people to switch off phone chargers when not in use, and encourage people to fly less and reduce private car ownership (Reynolds 2010), which would require wider planning around impacts on the economy, employment etc.

Policy makers need to highlight that easy steps towards more environmentally sound lifestyles have to be done by everybody, but that these steps might still be low-hanging fruits; these need to be followed by much more profound changes, which need to be supported through policy-making, through, e.g. preparing infrastructure, developing financial incentives, engaging CSOs, etc. In other words, even if this myth was true, there is a limit to what individual behaviour change can achieve: large-scale systemic changes to our economic system, regulations and infrastructures are required, in addition to lifestyle changes, in order to achieve true sustainability.

A further problem with the promotion of simple and painless actions is that these trivial actions are suggested as a response to alarming reports of environmental problems, the contrast between the scale of the problem and the solutions being proposed can be used to "deflate, mock and reject ... the very notion of climate change" (Ereaut and Segnit 2006: 21). However, the Institute for Public Policy Research suggests that using the myth to inject some energy into communications could be a potential solution: the "ordinary hero" is a normal, everyday person who does extraordinary and heroic actions in order to combat climate change (Ereaut and Segnit 2006).

Although it would be a mistake to rely on positive spillover as a strategy, there are ways to optimise the possibility of it happening: be clear about the environmental reasons for the behaviour change; make connections between the different pro-environmental behaviours to be encouraged; focus only on environmental behaviours and do not give multiple reasons including self-interest; focus on less common behaviours that have not already reached saturation with the public's attention (Crompton and Thøgersen 2009).

Myth 3: If everyone does a little we will achieve a lot

Behaviour change campaigns often use the phrase 'if everyone' to imply that small proenvironmental actions will result in large environmental improvements if many people do them. In connection with Myth 2, this myth relies on the notion that small changes in behaviour are enough if we believe that they will have some kind of multiplying effects. The myth has most probably evolved with good intentions to encourage people to make entrylevel behaviour changes in the hope that they would spill-over to activities in other areas and that at the aggregate level significant improvements can be reached (see also Myth 2). In addition, the myth encourages behaviour change by promoting the belief that their contribution is worthwhile and significant, and that others are also taking responsibility and making changes: this positive encouragement, as well as promotion of sustainable behaviour as normal, is indeed important for motivating sustainable behaviour (Gaheer 2006; NCC and SDC 2006).

Consequences of the myth

Despite the good intentions underlying this myth, there is some evidence that people may be discouraged when information is framed in this "if everyone" language: people know (and can observe in their own lives) that "everyone" is not playing their part, so this type of language can be demotivating and discourage action. If it only makes a difference if everyone does it, then what is the point? Related to this is the tendency to state that there is no point in "us making sacrifices" if others (other people locally or even other countries, especially China and the US) do not act (Ipsos MORI 2007; Reynolds 2010).

This myth presents a further difficulty: a number of researchers have noted the imbalance between - on the one hand - information provided about the nature of scale of e.g. climate change and the extremely serious consequences already manifesting as a result, and on the other hand, the incredibly small actions we are asking people to take in response to this crisis (Hounsham 2006). The trivial nature of the suggested actions may undermine the message about t he seriousness of the various environmental crises we have created. As an example of this MacKay (2008: 114) quotes a campaign from the UK which states that if every one of the UK's 25 million mobile phones was left plugged in and switched on, it would use enough energy to power 66,000 homes. This sounds like a huge amount, and that unplugging your phone charger will make a big difference – but not when compared to the overall energy use of those 25 million homes: MacKay (2008: 114) then suggests it would be calmer to state that "If everyone leaves their mobile phone charger plugged in, those chargers will use one quarter of one percent of their homes' electricity". The relative importance of this behaviour change is now clear.

Dispelling the myth

This myth is not supported by scientific evidence: if large numbers of people make marginal changes to their lifestyles, only marginal collective improvements can be expected (Crompton and Thøgersen 2009). "Don't be distracted by the myth that 'every little helps.' If

everyone does a little, we'll achieve only a little. We must do a lot. What's required are big changes in demand and in supply" (McKay 2008: 114).

The IPCC's Fourth Assessment Report suggests that it may be necessary to reduce global emissions by up to 85% (compared to 1990 levels) by 2050 in order to restrict global temperature increases to 2°C (IPCC 2007). So the challenges for creating a sustainable society are enormous.

However, it is true that people are more successful in making changes when they are tackled as a group rather than attempting the change individually: some good examples are Global Actions Plan's Household Eco-Teams, and many examples of Community Based Social Marketing projects (McKenzie-Mohr and Smith 2000). However, some of the behaviours commonly suggested, (such as hang-drying clothes or buying efficient white goods) will only have a limited impact on the environment. For example, the EU Emissions Trading Scheme (ETS) means that if people choose a renewable energy supplier or reduce their household energy emissions, the CO₂ 'saved' will just be allocated to another polluter to use, so will not result in an overall decrease in GHG emissions (Sandbag 2010). On the other hand, their actions would have other very positive impacts, such as supporting progressive industries and boycotting regressive ones, and setting a pioneering example ('moral leadership') that may inspire others. In addition, those that choose more sustainable lifestyles have the satisfaction of taking responsibility for their share of global environmental impacts, which could be an important part of creating, maintaining and disseminating proenvironmental values (Sandbag 2010).

Policy implications

The purpose is not to dissuade people from making small changes that result in small environmental improvements, but to also focus their attention on the importance of making the larger changes in lifestyles that would result in significant environmental improvements, such as reducing consumption of flights, car journeys, and meat / dairy products. Thus, what policy makers can do is to provide people with a vision and goal that large changes in their lifestyles are needed for creating a more sustainable society, and that these changes are both possible and desirable: reference could be made to the growing body of research on well-being and sustainable lifestyles, which suggests that people with strong intrinsic values (such as self-development, affiliation, sense of community) tend to be both happier and have higher levels of pro-environmental action than those with extrinsic values, such as material success, image, status (Crompton and Kasser 2009).

Myth 4: Green consumption is the solution

Another myth is that greening markets, by producing green products and encouraging their consumption, is the solution to the on-going environmental crises. That is why in recent decades we have witnessed the emergence of more efficient technologies and more ecoefficient products: products are becoming smaller, they use less energy and other consumables during their lifecycle, products may have fewer environmental impacts per unit of product. The myth rests on the general belief that eco-efficiency improvements and technological innovation will solve the environmental and development problems we are facing and that there is no need to address the demand side – consumption levels.

Consequences of the myth

The consequence of the myth is that in the last 30-40 years large investments have been made into improving technological progress and labour productivity. It is widely assumed that by the time resources are exhausted, new alternatives will be found or created.

Dispelling the myth

Despite the trends for more efficient production, the amount of products per household and person is growing and the overall size and speed of material and waste flows in society is mounting. This is because product life-spans are generally decreasing, exacerbated by the "throw-away mentality" created with the help of advertising and marketing (Slade 2006).

Technological development and innovation also partly lead to the increasing share of environmentally sound products on the market. Despite that, the aggregate environmental impacts from consumption of goods are still increasing due to the sheer number and volume of material products on the market (level of affluence) and their growing use by the rising number of consumers (population) (ETC/SCP 2009).

Many of the efficiency improvements have been negated due to rebound effects (Herring and Sorell 2009). One example is fuel efficient cars, which have enabled people to drive further or more often for the same amount of money: so while efficiency increased, total fuel use from driving outstripped this efficiency saving. This was compounded by people travelling further to work and vacation, and the emergence of driving as a leisure-time activity. The rebound effect may also cause reduced efficiency / energy-use increases in other areas: for example, when people save money from installing energy efficient equipment in the home, they may spend it on potentially carbon-intensive behaviours, e.g. flying on holiday more often (Platt and Retallack 2009).

Overall, seeing green consumption as the only solution promotes the idea that everincreasing consumption levels are sustainable.

Policy implications

Green products have some potential to reduce environmental impacts, but on their own they fall short of producing results that would stabilise current environmental burden at sustainable level. The reliance of policy makers solely on technical solutions to achieve sustainability goals is thus unjustified, in that it fails to tackle the various factors which continue to drive increasing levels of material consumption (Mont and Power 2010; Power and Mont 2010). Although technological improvements no doubt have great potential to reduce the environmental impacts of current lifestyles, their contribution to sustainable consumption has limitations, and is often negated by various types of rebound effects (Sorrell 2009), as well as by European climate policy, as seen in Myth 4. Thus, together with acknowledging the power of technology, its limitations should not be forgotten and measures to tackle unsustainable patterns and levels of consumption involving people's aspirations, values and consumption levels need to be addressed.

Myth 5: Consumers should lead the shift to sustainability

It is often heard especially in speeches of policy makers that consumers have the prime responsibility for making sustainability a reality. Households indeed have an important role to play in the quest towards sustainable consumption since household activities are responsible for 40% of overall environmental impacts. Among these activities, especially energy use for house heating/cooling, transportation and food consumption are responsible for 75% of environmental load from households (Tukker, Huppes et al. 2005). In addition, it is often said that consumers are responsible for driving markets, and that producers are just responding to demand.

Consequences of the myth

The consequence of this myth is that political efforts tend to focus on raising public awareness about environmental and social issues, rather than developing more effective tools, e.g. administrative or economic instruments that address unsustainable consumption patterns and levels.

Dispelling the myth

An issue in dispelling the myth that individuals and households should take the lead in the shift to sustainability is that the sustainability agenda has not yet penetrated mass culture, and has not become a part of everyday life. Thus, if consumers make sustainable choices they are going against the social norms of mainstream society. This is a significant barrier for individuals to embark on sustainability journey since a person's sense of self and well-being is based on relations with a reference group (Howarth 1996).

The values of a reference group and social networks are influenced by wider society, including governments. Policy-makers are constantly intervening to influence values and the wider social context, through mechanisms and signals such as the structure of the education system, public sector performance indicators, procurement policies, planning guidelines for public and social space, employment policy, trading standards, regulation of advertising and the media, and support to community initiatives and faith groups (Jackson 2009: 94-95).

Individual consumption choices also depend to a large degree on existing and available infrastructure and on regulatory and normative institutions in society. Often, even if consumers are willing to make sustainable choices, they find themselves locked into unsustainable practices, unsustainable infrastructures and unsustainable choices of products and services (Sanne 2002). The type of infrastructure has a direct effect on individual consumption patterns and associated environmental impacts (Jonsson, Gullberg et al. 2000).

The choice of products and services in shops and their prices demonstrates the everyday conflicts individuals are facing: on the one hand they are asked by politicians to choose greener products; on the other hand, the price premium for environmental features of products makes them less attractive, or even out of reach for many people. One can find other numerous examples of how people, consumers and households are given conflicting messages all the time. For example, travel by car is often compensated by employers, airlines encourage plane use by bonus and membership schemes, tobacco industry is facing a huge image problem and at the same time tobacco farmers are subsidised by the EU, and while environmental issues are gaining importance in the eyes of the public, environmental taxes are no match to labour taxation. And all of this comes in addition to the main message of advertising industry that "there is a product for every need" (Durning 1992).

So really, rather than expecting individual consumers to lead the change to sustainability, we should be pleasantly surprised that - despite the infrastructural and regulatory "lock-in", continuous advertising and marketing efforts, incentives for unsustainable choices, and

social norms that celebrate increasing material consumption – some people are actively reducing their consumption levels and choosing more sustainable lifestyles.

Policy implications

Consumers are an important actor in society, but on their own they cannot change the societal structures and social norms. Businesses, civil society and policy makers all have extremely important roles to play in promoting more sustainable consumption patterns and levels. These three actors form the so-called triangle of change for sustainability, in which responsibility for leadership remains with governments and authorities; it is policy-makers that have the greatest practical influence on development of the infrastructure, regulations and social norms and priorities needed to promote sustainable consumption (NCC and SDC 2006:6).

Dominant societal values shape the development of social norms, and are in turn shaped by formal regulatory and infrastructural frameworks. Thus, the development of infrastructure forms particular patterns of consumption and determines which behaviours are easy or difficult. Businesses and governments need to ensure that there is an infrastructure in place that shapes household behaviour into a more sustainable direction, whether it is a waste collection system, parking spaces for shared cars, refurbishing or recycling facilities or infrastructure for safe final disposal. If the infrastructure does not exist, it is meaningless to stimulate consumers. On the other hand, it is important to ensure that once infrastructure is in place it is used properly.

"When new products and living standards are normalised, not only expectations are formed, but simultaneously, the new standards are built into the social and material structures of society ..." (Røpke 2009: p. 4).

In addition to providing the regulatory and economic framework and infrastructure for more sustainable lifestyles, governments can lead by example - through Green Public Procurement. In a UK survey, 60% of people said they would do more to help the environment if the government did too (DEFRA 2007). Greening the operations of governments and municipalities also provides a good example to businesses. Examples of initiatives are: ISO 14001 standard certification; green procurement practices, such as purchasing organic, fair trade or local produce; buying services instead of products, e.g. car leasing; and substituting business travel with videoconferencing (Swedish EPA 2007). It could also be very motivating for the wider public to see state employees embodying the advice they give about living green lifestyles, to see that this is not only possible, but actually becoming mainstream and normal.

Businesses also have to find ways of making profit without jeopardising the environment, without being dependant on constant growth (zero-growth strategies), or reliance on material goods of low quality (closed-loop material flows). They can also help normalise sustainable practices, for example, choice-editing removes products with high environmental impacts from sale. Governments can lead here as well, for example the ban of conventional light bulbs. Choice-editing leaves consumers to choose between ranges of more sustainable products - the retailer or government takes responsibility for providing good products, rather than pushing the responsibility of choosing the right ones onto the consumer.

Myth 6: Sustainability means "living in caves"

Another myth that has penetrated the sustainability discussion is that in order to live sustainably we will have to consume less, which will result in less fun, less convenience and a lower standard of living.

The myth originates in the understanding that more consumption and material wealth means more happiness and well-being, which justifies continuous economic growth, increasing consumption levels and the growth of the global consumer class. Living sustainably means fewer material possessions (or fewer activities with high energy consumption) and consequent economic de-growth or collapse, which would bring us into living in caves. This means that it is unreasonable to ask people to change their lifestyles towards more sustainable ones, since "you can't sell sacrifice." This myth is also exacerbated by calculations showing that an equitable share of GHG emissions would be around 2 tonnes CO₂ per person, which implies significantly lower levels of material consumption than is currently typical.

Consequences of the myth

The consequences of this myth are resistance to addressing consumption levels, and major but futile efforts of policy makers to improve consumption patterns merely by greening markets and products and encouraging more consumption of greener products. Opportunities are being missed, for example for product-sharing schemes or promoting closed loop systems that would reduce overall reliance on virgin resources, or for promoting alternatives to intensive consumption that could increase well-being, such as community food-growing schemes.

This myth also promotes a tendency to believe that nothing can be done, the challenge is too great, or that it is not pragmatic to make changes that would change consumption patterns or material standards of living

Dispelling the myth

It assumed that we cannot persuade people to consume less, but perhaps if the options were marketed more honestly, society would be happy to embrace change. For example, the cosmetics industry heavily relies on use of chemicals, which are rarely tested in combination; these chemicals all together are carcinogenic and many of them are suspected hormone disruptors. Could we persuade people to consume less of these chemical-based cosmetic products and more of the natural alternatives if products and advertising were regulated in a more sustainable way?

The link between economic growth, material acquisition and happiness and well-being is also being contested. Studies demonstrate that the continual increases in income and consumption tend to perpetuate dissatisfaction rather than improving well-being (Max-Neef 1995; Marks, Abdallah et al. 2006; Thompson, Abdallah et al. 2007; Huesemann and Huesemann 2008). This is supported by the recent polls of values in EU27 countries that demonstrate that the most important notions associated with happiness are health (73%), love (44%), work (37%), peace (35%) and money (32%) (European Commission 2008).

There is a sense among a minority of population that 'less is more', that having time to enjoy the simple pleasures in life and connecting more with people and environment can bring greater rewards than chasing ever greater levels of career success, status and income. These people choose to live lives that rely on less material possessions, or prefer simplicity lifestyles where the value of life is not in the level of income, but in the balance in life: between work and family and friends, between personal development and care for others, between social networks and individual accomplishments. The voluntary simplicity movement as a whole is gaining momentum in the United States and Western Europe, in addition to growth in associated lifestyles, such as voluntary downshifting (McDonald, Oates et al. 2006). Other examples of current movements linked with simplicity or environmental consciousness are Transition Towns, CRAGS, Give What We Can, the LOHAS movement, Ashton Hayes (the UK's first self-organising zero-carbon village), Samsø (CO2 neutral Danish island), as well as those who just try to live sustainable lifestyles because they believe it is the right thing to do. There is also a resurgence of alternative movements and campaigns, e.g. Buy Nothing Day, Slow Living movement and others.

The international Transition Towns movement involves communities coming together and making their own plans for responding to the threats of peak oil and climate change. They work with existing community groups, local authorities and interested individuals to set up locally-based solutions in a variety of areas, from practical skills training programmes, to establishing allotments, working with local businesses to improve energy efficiency, setting

up local currencies, and many more. The transition model has proved to be popular, with groups starting up in most parts of the Westernised world (and also in Chile). The transition model works on the principle of "learning by doing", modelling what others around us do, and creating new social norms – all of which are thought to be among the more effective routes to sustainable behaviour change.

Policy implications

Of course the goal is to maintain or improve the standard of living for everyone (which means increasing consumption levels for the world's poorest people), while drastically reducing environmental destruction. This is a significant challenge, but it can be approached on many fronts simultaneously: technological and efficiency improvements, promotion of prosocial and pro-environmental values, using policy to move consumption towards lessmaterially intensive patterns and levels – so there is cause for hope rather than despair. Currently most people do not wish to differentiate and draw attention to themselves from others by consuming less, perhaps partly as this could have associations with being 'mean' with money, or not being aware of or respectful to social /professional conventions. Such issues could be solved through more official changes in normal standards of behaviour that relate to consumption. For example, in 2009 the prime minister of Bangladesh ordered male government employees (including ministers) to stop wearing suits, jackets and ties to work, to enable air conditioning systems to be used less. In Bangladesh there is not enough electricity to meet demand, resulting in power cuts, so wearing loose clothes to work and keeping the air-conditioning at 24°C or above enables the government to save electricity, which also has environmental and financial benefits for the government (Dummet 2009). They hope to expand the suit ban to the business sector and eventually re-write Bangladesh's official dress code (Dummet 2009). These examples show that it can be relatively quick and easy to change aspects of normal standards of behaviour, especially if powerful and prestigious groups are included and leaders also act accordingly.

The study of individuals, households and groups of people who chose simplified lifestyles is currently limited, but of great relevance for policy makers in understanding the process people go through in moving toward sustainable consumption (McDonald, Oates et al. 2006). People may adopt simpler and less materially-intensive lifestyles for many reasons, including dissatisfaction with high-stress lifestyles (Zavestoski 2002), and wanting to spend time on activities outside of work, as well as environmental concern (Huneke 2005); however, many simplifiers share the common desire to have greater control over their own time and money: "They want to make deliberate decisions rather than feel they are conforming to the image

advanced in advertising and popular culture" (Huneke 2005: 547). Huneke also discusses the possibility that voluntary simplifiers could 'blaze a trial' as early adaptors of more sustainable lifestyles that others would aspire to: "No single social movement is going to lower overall consumption to sustainable levels. However, the respondents to this survey appear to have found their simplified lives not only less resource intensive but also more intrinsically satisfying, suggesting that this lifestyle may become increasingly widespread" (Huneke 2005: 549). However, the (limited) research in this emerging field of alternative consumption also suggests that it is extremely difficult to live in opposition to mainstream values and institutions, and as a result sustainable lifestyles are currently not a realistic or attractive option for most people, who do not want to be an 'outsider' or pioneer to this extent (Evans and Abrahamse 2008; Jackson 2009).

Green Engage's survey in the UK showed that people think green lifestyles are healthy, a good idea, and make you feel good. However people also think that green lifestyles are hippy, complicated, difficult, expensive, boring, and not cool. Thus there is a need to tackle both the practical barriers to green living (e.g. why is flying often cheaper than taking the train?) and the emotional and psychological barriers (e.g. camping holidays in home country are not generally seen as attractive or fun). These kinds of issues could possibly be addressed through social marketing campaigns to promote sustainable practices, and also through advertising bans, to ensure that the most harmful practices are not promoted. In the same way that some countries now ban or restrict advertising of tobacco, pornography or marketing at children due to the potential for these products to harm, authorities could consider advertising restrictions for e.g. cars, flights, meat, non-renewable energy, in recognition of their potential to harm us at the collective, rather than individual level. Policy makers could also ensure that society actually enables sustainable lifestyles through offering alternative means for people to display their status and signal their worth to society, e.g. through voluntary work, contribution to community development or through personal development.

To enable some of these changes a shift from income to leisure time through shorter-hours work contracts might be advocated (Schor 2005). "In France, the introduction of the 35-hour week has stimulated self-reflection among consumers and encouraged a reassessment of values related to consumption so that less commoditized activities have been favoured and more time is spent together with friends and family. . . . Changing consumer values and priorities might also open up the possibilities for more radical sustainable consumption policies, addressing aggregate consumption and ever increasing standards" (Christensen, Godskesen et al. 2007: 112). This picture fits with anecdotal evidence about workers who

have been given short-time contracts during the economic crisis (typically working 75% or 80% of normal hours in return for reduced pay): some workers would now prefer to keep their short-time hours and reduced pay rather than return to their normal working conditions – up to 30% of staff in some companies (Pignal and Schäfer 2009). These examples demonstrate that well-being and quality of life do not directly depend on the high resource consumption.

Myth 7: Appealing to people's self-interest is the path to sustainable behaviour

One of the recently emerging perceptions among policy-makers and NGOs alike is the belief that appealing to peoples' self-interest is the best path to encouraging sustainable behaviour (European Commission 2010). This myth is based on the traditional marketing "wisdom" - meet people where they are and tell them what's in it for them – that people are persuaded to act when it saves them money, makes them look cool, gives them status and other personal benefits at no or limited personal cost.

Consequences of the myth

Behaviour change campaigns and messages are often run according to the same principles as product marketing, including the suggestion that the motivations for behaviour change are unimportant, 'as long as it works' (Crompton 2008).

This approach can indeed be successful for changing individual behaviours in the short term and for specific behaviours that are easy to link to increasing personal utility. The problem arises when the more challenging and currently unpopular behaviour changes, such as reducing dairy consumption and taking fewer flights / holidays, need to be 'sold' to the public. Another consequence of relying on self-interest is that this approach further condones and embeds materialistic values and behaviours, and perhaps to an overall decrease in concern and action to protect the environment, despite gains on specific behaviours. Research shows that people exposed to commercial marketing are more likely to express materialistic, 'extrinsic values' (such as acquisition of material goods, financial success, image and social recognition) and to be less concerned with pro-environmental action (Crompton 2008, Reynolds 2010).

Similarly, the "business case for sustainable development" relies on environmental improvements coinciding with money-saving or money-making actions: it undoubtedly leads to some environmental improvements, but runs the risk of promoting the idea that environmental actions need only be taken when they are politically or economically convenient (Crompton and Kasser 2010).

Kasser and Crompton suggest that this is very often the case: "Environmental regulation is often opposed on the grounds that it will conflict with economic growth ... More often still, ambitious regulatory interventions may never even be publicly discussed because of the *chilling* effect of insistence that environmental regulation must be compatible with economic growth, the profits or business, or the sovereignty of consumer choice" (Crompton and Kasser 2010: 3).

Dispelling the myth

Where a pro-environmental action coincides with a person's pursuit of status, image etc, the marketing approach can be effective in changing behaviour. However, people who engage strongly with the more materialistic values of consumer culture, such as status, money and image, have higher levels of consumption, higher ecological footprints, and engage less in pro-environmental behaviours; conversely, those with strong intrinsic values, such as self-development, building strong relationships, and improving the wider community, are not only more likely to engage in pro-environmental behaviour, but are also more likely to be happy (Brown and Kasser 2005).

Appealing to self-interest when promoting pro-environmental behaviours might backfire when there is a need to promote policies without personal benefits or which might cost money, (as happened with the UK's Fuel Price Escalator, which was ended in 2000, partly due to fuel protests), or when there is a need to bring in disincentives for popular behaviours e.g. flight taxes. For example, if running a more efficient car is framed as a "money-saving" choice, this may make people more resistant to the idea of increased taxation on private car use — unless money-saving is promoted in conjunction with the idea that reducing spending and consumption is the key to the goal of working less and having more free time.

Another consideration is that with no appeal to values other than self-interest, it is likely that the money saved from a more sustainable behaviour (reducing or abandoning car use) will be redirected to other activities that the person values, such as flying on holiday: this indirect rebound effect means that environmental improvements in one area of lifestyle do not automatically result in overall environmental improvement, unless the underlying values of society are to act sustainably (Platt and Retallack 2009).

These unintended side-effects of trying to promote sustainable behaviour by appealing to self interest and personal benefits can be described as *iatrogenic* effects, in other words they may inadvertently exacerbate environmental problems in the longer term by further promoting the values that lead to lack of regard for the environment and quality of life for other people (Crompton and Kasser 2010).

In contrast, promoting intrinsic values is not dependent on overlaps between sustainable actions and personal benefits, and so can be applied to all behaviours that form part of a sustainable lifestyle; at the same time such an approach would help to build public support for government intervention on environmental and pro-social policies (Crompton 2009). The rebound effect would become less of a concern, as values influence whole lifestyles as well as individual behaviours (Crompton 2009); the major disadvantage of this approach is that is currently less popular and would need great political leadership and vision to get started.

Policy implications

A well-framed campaign encouraging behaviour changes is thought to be important in leading to greater normalisation and public acceptance of government interventions on sustainability, which is crucial factor in enabling governments to propose wider changes commensurate with the scale of the environmental challenges currently faced: in the UK at least, politicians call on NGOs to generate more public pressure on certain issues in order to "help create the political space for intervention". So, the way sustainable consumption is framed helps to determine the values that "come to dominate public discourse and shape public opinion" (Crompton and Thøgersen 2009: 28), whether those are pro-environmental or the marketing values of self-interest and greed. Instead of appealing to self-interest, policy makers need to ensure that societal issues and societal good are advocated as a legitimate reason for individual actions, which also lead to higher levels of well-being and higher levels of pro-environmental and pro-social behaviour.

The good news is that cross-cultural studies indicate intrinsic values are among many people's highest priorities, and so promotion of such values could be well-accepted by many parts of the population (Kasser 2008).

An example of how policy-makers could promote intrinsic values and sustainable consumption is through "values-based purchasing and investment" (Kasser 2008), for example ethical banking and investment, purchasing fairly traded goods, buying from companies with ethical policies etc.

Intrinsic values can also be promoted by regulating advertising and restricting its use in public places, as with the ban on outdoor advertising in Sao Paulo, and laws against advertising to children in Sweden (Crompton and Kasser 2010). Development of alternative indicators that measure social goals and well-being as well as financial activity, could help to re-frame public and political debate. And of course intrinsic values can be activated by governments, businesses and NGOs through framing their messages and campaigns pro-

environmental and pro-social values, rather than trying to "sell" us the idea that we can look cool and get rich by taking a few small green steps.

4. Conclusion

Dispelling the myths about consumption behaviour leads us to conclude that promoting sustainable consumption is more complicated than current policy initiatives would suggest: it is not enough to provide people with more information, and hope this will lead them to buy some greener products, and gradually engage with more difficult sustainable lifestyle changes. For most people, acting sustainably is an effort – not just because of pricing, infrastructure and the habits that these encourage, but also because making ourselves different from the mainstream carries no reward (and strong disincentives) for most people, either financially or socially.

Governments will have to lead the way to sustainability and facilitate the vital participation of businesses and civil society, as well as individuals and households. The triangle of change, or rather all stakeholders in society have a role to play in making sustainable lifestyles easier and more socially acceptable by providing the necessary infrastructure, by developing formal institutions and shaping social norms.

"Tackling the more intractable issues . . . may require a deep-rooted shift in societal values, but even here government can effect change through its policies and practice" (NCC and SDC 2006: 33).

The framing of behaviour change policy instruments is of crucial importance in promoting the values of society: reinforcing materialistic and self-interested values is unlikely to provide the longer-term acceptance of systemic policy interventions that is needed to tackle the many environmental issues we face today. We need the economic and infrastructural changes that reward "doing the right thing" and normalise sustainable lifestyles; and we also need a change in values and public opinion that makes sustainable levels and patterns of consumption desirable. We need consumption policies that are based on an understanding of consumption at the societal, rather than individual level.

References

- Albarracin, D., B. T. Johnson, et al. (2001). "Theories of reasoned action and planned behaviour as models of condom use: A meta-analysis." Psychological Bulletin: 142-161.
- Balderjahn, I. (1988). "Personality Variables and Environmental Attitudes as Predictors of Ecologically Responsible Consumption Patterns." Journal of Business Research 17(1): 51-56.
- Belk, R. W., G. Ger, et al. (2003). "The Fire of Desire: A Multisited Inquiry into Consumer Passion." Journal of Consumer Research 30(3): 326-351.
- Bourdieu, P. (1984). Distinction: a social critique of the judgment of taste. Cambridge, Massachusetts, Harvard University Press.
- Brown, K. W. and T. Kasser (2005). "Are Psychological and Ecological Well-being Compatible? The Role of Values, Mindfulness, and Lifestyle." Social Indicators Research 74(2): 349-368.
- Christensen, T. H., M. Godskesen, et al. (2007). "Greening the Danes? Experience with consumption and environment policies." Journal of Consumer Policy 30(2): 91-116.
- Crompton, T. (2008). Weathercocks & Signposts, World Wildlife Foundation: 42.
- Crompton, T. (2009). "IPPR Consumer Power Report." Retrieved 2010-08-28, from http://www.identitycampaigning.org/2009/09/550/.
- Crompton, T. and T. Kasser (2009). Meeting Environmental Challenges: The Role of Human Identity. UK, World Wildlife Foundation.
- Crompton, T. and T. Kasser (2010). "Human Identity: A Missing Link in Environmental Campaigning." Environment: Science and Policy for Sustainable Development 52(4): 23 - 33
- Crompton, T. and J. Thøgersen (2009). Simple and Painless? The limitations of spillover in environmental campaigning, World Wildlife Foundation: 33.
- DEFRA (2007). Report, questionnaire and data tables following Survey of Public Attitudes and Behaviours toward the Environment. London, Department for Environment, Food and Rural Affairs: 213.
- Dessler, A. (2007). "Cognitive Dissonance and Climate Change Skepticism: How the Two are Related." Retrieved 2009-11-02, from http://www.grist.org/article/cognitive-dissonance-and-climate-change-skepticism/.
- Diekmann, A. and P. Preisendörfer (1998). "Environmental behaviour: Discrepancies between aspirations and reality." Rationality and Society 10(1): 79-102.
- Downing, P. and J. Ballantyne (2007). Tipping Point or Turning Point? Social Marketing & Climate Change. London, Ipsos MORI Social Research Institute.
- Dummet, M. (2009) "Bangladesh suit ban to save power." BBC News.
- Durning, A. (1992). How Much is Enough? The Consumer Society and the Future of the Earth. New York, W. W. Norton & Company.
- EEA (2009). The benefits of and barriers to Ecological Tax Reform. Copenhagen, European Environmental Agency: 6.
- Ereaut, G. and N. Segnit (2006). Warm Words: How We Are Telling the Climate Story and Can We Tell It Better? London, Institute for Public Policy Research.
- ETC/SCP (2009). Environmental Pressures from European Consumption and Production. Copenhagen, European Topic Centre on Sustainable Consumption and Production and European Environmental Agency: 67.
- European Commission (2008). Eurobarometer 69. 1. Values of Europeans. Brussels, TNS Opinion & Social: 140.
- European Commission. (2010). "Self-interest could hold key to sustainable consumption." Science for Environment Policy. 15 July 2010 Retrieved 2010-08-18, from http://ec.europa.eu/environment/integration/research/newsalert/pdf/204na1.pdf.
- Evans, D. and W. Abrahamse (2008). Beyond Rhetoric: the Possibilities of and for 'Sustainable Lifestyles'. Guildford, University of Surrey.
- Festinger, L. (1957). A theory of cognitive dissonance. Stanford, CA, Stanford University Press.
- Freedman, J. and S. Fraser (1966). "Compliance without pressure: The foot-in-the-door technique." Journal of Personality and Social Psychology 4: 195-202.
- Gaheer, S. (2006). Influencing Behavioural Change and Public Engagement in Sustainable Development and Living Sustainably, East Midlands Regional Assembly
- Godin, G., M. Conner, et al. (2005). "Bridging the intention-behaviour gap: The role of moral norm." British Journal of Social Psychology 44(4): 497-512(416).
- Gronow, J. and A. Warde (2001). Ordinary Consumption. London, Routledge.

- Herring, H. and S. Sorell (2009). Energy Efficiency and Sustainable Consumption. The Rebound Effect, Palgrave, Macmillan.
- Hounsham, S. (2006). Painting the Town Green: how to persuade people to be environmentally friendly. London, Green-Engage Communications.
- Howarth, R. B. (1996). "Status effects and environmental externalities." Ecological Economics 16(1): 25-34.
- Huesemann, M. H. and J. A. Huesemann (2008). "Will progress in science and technology avert or accelerate global collapse? A critical analysis and policy recommendations." Environment, Development and Sustainability 10(6): 787-825.
- Huneke, M. E. (2005). "The face of the un-consumer: An empirical examination of the practice of voluntary simplicity in the United States." Psychology & Marketing 22(7): 527-550.
- IPCC (2007). Climate change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, Cambridge University Press.
- Ipsos MORI (2007). Sustainability Issues In The Retail Sector, Ipsos MORI Reputation Centre: 76.
- Jackson, T. (2009). Prosperity without Growth, Earthscan.
- Jackson, T. (2009). Prosperity without Growth? The Transition to a Sustainable Economy. London, Sustainable Development Commission: 136.
- Jonsson, D., A. Gullberg, et al. (2000). Infrasystemens dynamik om sociotekniska förändringsprocesser och hållbar utveckling [Dynamics of the Infrasystem on socio-technical processes of change and sustainable development]. Stockholm, Forskningsgruppen för miljöstrategiska studier och Avdelningen för teknik- och vetenskapshistoria, KTH: 256.
- Kaiser, F. G. (1998). "A general measure of ecological behaviour." Journal of Applied Social Psychology 28: 395-442.
- Kasser, T. (2008). Values and Prosperity. London, Sustainable Development Commission.
- Kollmuss, A. and J. Agyeman (2002). "Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behavior?" Environmental Education Research 8(3): 239-260.
- Laverie, D. A., R. E. Kleine, III, et al. (1993). "Linking Emotions And Values In Consumption Experiences: An Exploratory Study." Advances in Consumer Research 20: 70-75.
- Luzar, E. J. and K. J. Cosse (1998). "Willingness to Pay or Intention to Pay: The Attitude-Behavior Relationship in Contingent Valuation." Journal of Socio-Economics 27(3): 427-445.
- Marks, N., S. Abdallah, et al. (2006). The Happy Planet Index: An Index of human well-being and environmental impact. London, New economics foundation.
- Max-Neef, M. (1995). "Economic Growth and Quality of Life: A Threshold Hypothesis." Ecological Economics 15: 115-118.
- McDonald, S., C. J. Oates, et al. (2006). "Toward Sustainable Consumption: Researching Voluntary Simplifiers." Psychology & Marketing 23(6): 515-534.
- McKay, D. (2008). Sustainable Energy without the hot air. Cambridge, UIT Cambridge Ltd.
- McKenzie-Mohr, D., L. S. Nemiroff, et al. (1995). "Determinants of Responsible Environmental Behavior." Journal of Social Issues 51(4): 139-156.
- McKenzie-Mohr, D. and W. Smith (2000). Fostering Sustainable Behaviour: An introduction to community-based social marketing. Gabriola Island, BC, Canada, New Society Publishers.
- Mick, D. G. and S. Fournier (1998). "Paradoxes of Technology: Consumer Cognizance, Emotions, and Coping Strategies." Journal of Consumer Research 25(2): 491-503.
- Mont, O. and C. Leire. (2008). "Socially responsible purchasing in the supply chain: the present state in Sweden and lessons for the future." Retrieved 2010-09-01, from http://www.msr.se/Documents/rapporter/MSR_2008_E8.pdf.
- Mont, O. and K. Power (2010). "The Role of Formal and Informal Forces in Shaping Consumption and Implications for a Sustainable Society. Part I " Sustainability 2(5): 2232-2252.
- NCC and SDC (2006). I will if you will Towards sustainable consumption. London, National Consumer Council and Sustainable Development Commission: 149.
- OECD (2001). OECD. Environmental Outlook. Paris.
- OECD (2008). Promoting sustainable consumption. Good practices in OECD countries. Paris, OECD:
- Pignal, S. and D. Schäfer (2009) "Short-time work carries long-term consequences." Financial Times Europe.

- Platt, R. and S. Retallack (2009). Consumer Power. How the public thinks lower-carbon behaviour could be made mainstream, Institute for Public Policy Research: 47.
- Power, K. and O. Mont (2010). "The Role of Formal and Informal Forces in Shaping Consumption and Implications for a Sustainable Society. Part II." Sustainability 2(5): 2573-2592.
- Reynolds, L. (2010). "The sum of the parts: Can we really reduce carbon emissions through individual behaviour change?" Journal of the Royal Society for Promotion of Health 130(1): 41-46.
- Richins, M. L. (1997). "Measuring Emotions in the Consumption Experience." Journal of Consumer Research 24(September): 127-146.
- Ronis, D. L., J. F. Yates, et al. (1989). Attitudes, decisions, and habits as determinants of repeated behavior. Attitude structure and function. A. R. Pratkanis, S. J. Breckler and A. G. Greenwald. Hillsdale, N.J., Lawrence Erlbaum: 213-239.
- Rubik, F., G. Scholl, et al. (2009). Innovative Approaches in European Sustainable Consumption Policies. Berlin and Heidelberg, Institute for Ecological Economy Research (IÖW): 155.
- Røpke, I. (2009). The role of consumption in global warming an ecological economic perspective. Anthology on Global warming, Routledge.
- Sandbag. (2010). "A Closer Look At Voluntary Carbon Action." Retrieved 2010-08-01, from http://sandbag.org.uk/files/sandbag.org.uk/Closer_Look_At_Voluntary_Carbon_Action.pdf.
- Sanne, C. (2002). "Willing consumers or locked-in?" Ecological Economics 42(1-2): 273-287.
- Schor, J. B. (2004). Born to Buy. The Commercialized Child and the New Consumer Culture. New York, Scribner.
- Schor, J. B. (2005). "Sustainable Consumption and Worktime Reduction." Journal of Industrial Ecology 9(1-2): 37-51.
- Slade, G. (2006). Made to break: technology and obsolescence in America, Harvard University Press. Sorrell, S. (2009). "Jevons' Paradox revisited: The evidence for backfire from improved energy efficiency." Energy Policy 37(4): 1456-1469.
- Southerton, D., H. Chappels, et al., Eds. (2004). Sustainable consumption. The implications of change infrastructures of provision, Edward Elgar Publishing.
- Swedish EPA (2007). Miljöanpassad upphandling i praktiken. En genomgång av offentliga upphandlingar 2007. Stockholm, Naturvårdsverket: 183.
- Thompson, S., S. Abdallah, et al. (2007). The European Happy Planet Index: An index of carbon efficiency and well-being in the EU. London, Friends of the Earth and NEF: 47.
- Thøgersen, J. (1999). "Spillover processes in the development of a sustainable consumption pattern." Journal of Economic Psychology 20: 53-81.
- Tukker, A., G. Huppes, et al. (2005). Environmental Impacts of Products. Analysis of the life cycle environmental impacts related to the total final consumption of the EU25. Sevilla, ESTO/IPTS: 117
- Van Raaij, W. F. (1995). A hierarchy of excuses for not behaving in a pro-environmental way. Sustainable Consumption Report from the International Conference on Consumption. E. Stø. Lysaker, National Institute for Consumer Research (SIFO): 209-244.
- Zavestoski, S. (2002). "The social-psychological bases of anticonsumption attitudes." Psychology & Marketing 19(2): 149-165.