

Sustainable Consumption

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Introduction

A sustainable consumption perspective on global climate and environmental policy is comprehensive, multifaceted, and, as this chapter will argue, fundamentally challenging for science and politics as well as for society in general. It induces us to critically reflect on core principles, on which our life is based. Indeed, a sustainable consumption perspective, more clearly than any other sustainability approach, forces us to ask whether we are willing and able to fundamentally change the politico-economic pillars of our societies in order to be able to reach a form of development that is sustainable.

Common to all sustainable consumption perspectives is their consideration of social and environmental burdens and necessary political reforms and interventions through the lens of the associated consumption activities and practices. Importantly, consumption activities and practices, in this context, refer not only to consumer choices, but also to the economic, political, social, and cultural contexts of these consumer choices. In other words, scholars and politicians applying a sustainable consumption perspective do not attribute all blame and responsibility for unsustainable consumption practices to the consumer.

Two principal approaches can be distinguished: “weak sustainable consumption” (WSC) and “strong sustainable consumption” (SSC) (Fuchs and Lorek 2005; Lorek and Fuchs 2013). The former supports the notion that sustainable consumption can be achieved via an increase in the efficiency of products, production processes, services, and the provision of these services alone. The latter focuses on the pursuit of fundamental shifts in consumption patterns and reductions¹ in consumption levels (mostly in industrialized countries).² It draws its core insights from research on the limited capacity of the Earth’s ecosystems and the empirical evidence of rising

consumption levels outpacing any gains in efficiency achieved, over the past decades. Although all research inevitably contains a normative basis, the SSC perspective in particular is explicitly normative in orientation. Scholars working in this field link their research to questions of the “good life,” of social justice and democracy, as well as “overconsumption” and “misconsumption” (Princen 2002). The present chapter will make the argument that such a normative focus on SSC in governance and research is first among the pivotal contributions a sustainable consumption perspective can make to global climate and environmental policy.

The chapter proceeds as follows. The next section provides an overview of sustainable consumption governance and research to date, discussing in particular the questions of moving beyond the efficiency focus as well as potential normative ambitions of sustainable consumption governance and research. Applying an SSC approach, the following section develops new insights on global climate policy, identifying opportunities as well as barriers to improvements in its reach and effectiveness. Finally, the concluding section summarizes the chapter with an outlook on research and governance needs, in particular those arising from an SSC approach to climate policy.

Global Sustainable Consumption Governance to Date

On the international political level, the Oslo Roundtable defined sustainable consumption as

the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations (Ministry of Environment, Norway 1994).

However, sustainable consumption has come to be associated with all kinds of meanings in governance and research activities. It can be linked to consumer health, consumer safety, quality of life, resource efficiency, waste reduction, or life-cycle thinking (Mont and Plepys 2008). Such a wide variation in use is familiar from many other concepts, including sustainable development. The variation can at least partly be explained by discursive, political contests over the meaning of the term and its implications and by the range of disciplines contributing to sustainable consumption research. Thus, it is necessary to always take a close look at the implied meaning of sustainable consumption when it shows up in debates or publications.

The above definition of sustainable consumption was one of the first results of intergovernmental and research processes, building on the arrival and establishment of sustainable consumption as a topic on the global political agenda.³ Subsequent efforts to frame the term in political processes led to a narrowing of the definition to questions of efficiency improvements and technological innovation, that is, to WSC (Fuchs and Lorek 2005). Consumption levels and patterns were taken as given, while the aim became satisfying them with fewer resources. In addition to limiting the focus on resource efficiency, the political debate emphasized consumer rights and sovereignty. Politically, this is an attractive strategy. After all, the notion of

consumer sovereignty implies the existence of consumer ability to make purchasing decisions free from structural constraints. Consumer rights and sovereignty, however, can also be used to imply consumer responsibility. Thus, the concept is often used to argue that it is consumers who should shift the market towards sustainability and that interventions should focus on urging consumers to improve the sustainability characteristics of their consumption choices as well as on enabling consumers to do so.

In this vein, countless activities by international governmental organizations (IGOs) such as the Commission for Sustainable Development (CSD), the Organisation for Economic Co-operation and Development (OECD), the European Union (EU), and the United Nations Environmental Programme (UNEP), as well as individual governments, have aimed to foster research and reforms on improvements in the efficiency of consumption, innumerable reports on sustainable consumption have been sponsored and published by IGOs, and numerous meetings have been held (Fuchs and Lorek 2005; Berg 2011). The work commissioned and carried out by these actors contributed to the increasing availability of information on consumption trends, indicators, and policies. Moreover, it raised awareness for the relevance of sustainable consumption on the governance agenda. Yet, the core focus of the activities was limited to resource efficiency and technological solutions to environmental problems caused by consumption, with a particular interest in innovations for business (Fuchs and Lorek 2005). With the exception of *Consumption Opportunities*⁴ published by UNEP in 2001, there was no questioning of the larger societal contexts and implications of Western consumption levels and patterns. On the contrary, the head of UNEP DTIE (Division of Technology, Industry and Economics) stressed that “sustainable consumption is not about consuming less, it is about consuming differently, consuming efficiently, and having an improved quality of life” (UNEP/CDG 2000: 12). The fundamental, underlying notion was the need for improvements in the sustainability of consumption in parallel to continuing economic growth. Moreover, the emphasis was on consumer sovereignty, with a UNEP DTIE report stressing the “rights of free consumers,” for instance (Bentley and de Leeuw 2000). Here, the official political agenda closely mirrored business perspectives. A report issued by the World Business Council for Sustainable Development (WBSCD 2002) for the World Summit on Sustainable Development (WSSD) explicitly attributed the key role in shaping markets to consumers.⁵

At the WSSD in Johannesburg in 2002, no significant progress on global sustainable consumption governance was made. Negotiators agreed on a call for governments to “encourage and promote the development of a 10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production” (United Nations 2002: 7). Thus, the political aim was only broadly defined, without any specificity or binding elements. Potential conflicts between the sustainability of consumption and the continued pursuit of consumption-driven growth were not acknowledged. In the subsequent Marrakesh process,⁶ the major actors stressed again the importance of de-coupling economic growth and environmental degradation through improvements in the efficiency of resource use. In addition, a series of regional meetings were to serve as platforms for the exchange of knowledge. For this, seven task forces, representing voluntary initiatives of groups of interested countries, were created.⁷ However, by the year of the

Rio+20 summit, little tangible progress towards a redirection of global sustainable consumption governance had been achieved (Stakeholder Forum 2012).

At the same time, sustainable governance innovations are developing bottom-up, with increasing numbers of local currencies, community exchanges, food cooperatives, or public gardening initiatives developing (Eberle *et al.* 2006; J. Barber 2007; Lebel and Lorek 2008; Seyfang 2009). While such local initiatives may be encouraging, the crucial challenge is to move their ideas from the micro- to the meso-level to allow them to have a bigger impact.

Sustainable Consumption Research to Date

The following section can only provide a glimpse of the large amount of sustainable consumption research existing today. In this endeavor, it aims to identify core themes. The discussion starts with a brief overview on research on impacts and determinants of consumption as well as intervention strategies. It then points out one of the core controversies in the field, which relates to underlying conceptions of the consumer. Finally, the discussion delineates core challenges to strong sustainable consumption that can be identified on the basis of a critical reading of the history of consumption governance, today.

Impacts, Determinants, and Interventions

Researchers have tried to identify priority areas for sustainable consumption research and governance (Mortensen 2006; Kaenzig and Jolliet 2007). Some of these inquiries have looked at consumption clusters, identifying especially food, mobility, and housing as relevant (Lorek and Spangenberg 2001; EEA 2010). Taking such an approach one step further, other analyses identified, for example, agricultural processes and in particular meat products as particularly relevant in the food sector (Tukker *et al.* 2006), and heating as well as cooling (both in terms of air conditioning, where relevant, and in terms of refrigerators and freezers in the kitchen) as pivotal areas in the housing sector (Bürger 2011). Others have looked at key intervention points with both a high ecological impact and a substantial potential for the steering of consumption (Bilharz 2008). Moreover, scholars have tried to identify trends and model corresponding scenarios. Such analyses are important, because tomorrow's relevant impacts may still be "below the environmental radar" today (Røpke 2011).

Already some of the early work on sustainable consumption focused on the question of its determinants (Røpke 1999). Today, we know that socio-demographic and socio-economic characteristics such as age, income, gender, and education, norms and values, as well as psychological aspects such as perceptions of self-control and constructions of identity have an impact on the willingness to buy energy-efficient products, for instance (Vermeir and Verbeke 2006; Krömker and Dehmel 2011; Luchs and Mooradian 2012). Based on these various factors, scholars have identified consumer groups or lifestyles representing differences in (at least self-identified – see below) consumption levels and patterns (Baiocchi *et al.* 2010). Criticizing the individual-focused approaches, other scholars have shown the consumer environment to be an important factor (Shove 2003; Gram-Hanssen 2010). Besides obvious aspects such as the availability of environmentally or socially superior products in

markets and the provision of relevant information, changes in communication technologies, global finance and trade, and demographics (and the interactions between them), which induce shifts in job situations, gender roles, and time constraints, in turn, exert an influence on the sustainability of consumption long before the consumer ever makes a choice (Fuchs and Lorek 2001; Røpke and Godskesen 2007). Here, the embeddedness of seemingly individual characteristics such as worldviews in societal structures and practices becomes clear (Seyfang 2007).

With respect to interventions, scholars have investigated the effectiveness of instruments as well as potential roles of various actors. Thus, they have inquired into the use of command-and-control regulation such as standards and prohibitions, market-based/economic instruments such as environmental taxes or emission trading schemes, or information-based instruments such as eco-labels or information campaigns (Daugbjerg and Sønderskov 2011; Wolff and Schönherr 2011). With respect to the relevant actors, studies have evaluated the role of governmental actors in shaping the sustainability of consumption via the exercise of public authority, of business actors via self-regulation, public–private or private–private partnerships, and of civil society actors via information campaigns or the mobilization of consumers, for instance. Importantly, recent studies have shown regulatory approaches entailing enforcement and sanctioning mechanisms to be more effective than informational ones (Rehfeld *et al.* 2007). This finding runs counter to the political inclination to rely on informational instruments due to their lower political costs. Secondly and related to that point, the effectiveness of private governance approaches is highly controversial. Business-led private standards, in particular, can frequently be shown to perhaps improve some sustainability deficits of products and productions processes, but not to address broader sustainability challenges (Fuchs and Boll 2012).

Controversy: The More or Less Sovereign Consumer

One of the most fundamental controversies in the sustainable consumption debate is related to the understanding of the consumer as such. While some researchers see the consumer as a *homo economicus*, that is, a rational individual making decisions on the basis of cost–benefit calculations, others see the consumer as a *homo sociologicus*, that is, as a norm-driven individual basing consumption choices on social influences or personal values. Both groups, however, would consider consumers to be able to make relatively autonomous and flexible consumption choices. A fundamentally different perspective on consumers sees them instead as locked into consumption practices due to their habits and routines as well as the structural constraints resulting from their technological, socio-economic, political, and cultural environments (Røpke 1999; Sanne 2002).

This controversy extends to the question of consumer sovereignty. Scholars emphasizing the influence of structural constraints on consumers see little room for consumer sovereignty. In this context, the question of the “distancing” and “shading” of the effects of consumption decisions represents something bigger than merely the question of information availability (Princen 2002, 2010). Likewise, power asymmetries between global retail corporations and their political and media presence, on the one side, and individual consumers, on the other, serve to highlight challenges to the sovereignty of consumers in shaping markets (Fuchs and Lorek 2001;

Fuchs 2007). Moreover, the enormous role (interdependent) practices play in shaping everyday consumption reduces the space for intentional, well-thought-out consumption decisions, which the notion of consumer sovereignty presupposes (Shove 2003). Knowledge–action, attitude–behavior, or behavior–impact gaps show that consumers may choose environmentally or socially inferior products or practices, for instance, despite better knowledge due to the lock-in of consumption decisions or conflicting messages (Lebel *et al.* 2006; Markkula and Moisander 2012; Moraes *et al.* 2012). Even consumers making conscious sustainability choices frequently fail to significantly reduce their overall environmental footprint, because of the large share of ordinary, that is, everyday, habitual, hardly noticed, consumption (Csutora 2012). In sum, critical scholars have long challenged the politically attractive notion of “consumer sovereignty” and the associated “individualization of responsibility” on the grounds of their failure to consider the economic, political, and societal structural constraints within which consumption “decisions” occur (Maniates 2002).

The implications of the above controversies are even clearer when it comes to the recommendations for political interventions that are studied or derived. The rational, sovereign consumer may be convinced by economic incentives to make sustainably superior consumption choices, as well as perhaps through the provision of information appealing to extrinsic values (such as the cost savings to be achieved with an energy-efficient appliance). The norm-driven sovereign consumer may be persuaded through the provision of necessary information appealing to intrinsic values, inducing value change or the creation and promotion of enlightened role models (Munasinghe 2010). Interestingly, less rather than more information may be a promising strategy here, for instance to protect consumers from too many labels with little meaning (Möller 2004). For the locked-in consumer, regulation generating or at least facilitating changes in the living and working environment would appear to be necessary, accompanied perhaps by information or economic incentives inducing a “rethinking” of what would otherwise have been ordinary or routine consumption. Today, we know that all these intervention types have a role to play (Heiskanen and Lovio 2010; Warde 2011). Moreover, for the rational and locked-in consumers, and given the difficulty and long-term nature of value change even for the norm-driven consumer, choice editing as well as restrictions on advertising have to be considered as important political strategies, as long as so many signals drive consumption patterns and levels in an unsustainable direction (Brohmann and Eberle 2006; Yates 2008; Alexander *et al.* 2011; Dhar and Baylis 2011). While this clearly is an interventionist strategy for democratic societies, such interventions have proven acceptable in the past, when actions hurt others (consider restrictions on advertising for cigarettes). The question thus has to be whether the overconsumption of the world’s natural resources and over-pollution of its sinks by a small share of the global population does not constitute a similar imposition of burden on others.

The Challenges of Strong Sustainable Consumption

Another related controversy in the sustainable consumption literature and debate is the nature of change required for an effective pursuit of sustainable consumption and the ease or difficulty with which such change can be achieved. Early on, some

scholars argued that evolution has equipped us with a disposition based on instinctive and long-learned behavior patterns, which may well include an inclination for accumulation (McDougall 1923). Other scholars would reject such a view. They probably would be less critical, however, of an argument that humans as social beings have an inclination to position themselves in social networks and hierarchies. Such a positioning can be pursued with a range of signifiers, of course. As a long list of thinkers have pointed out, however, we have increasingly learned to use material goods as signifiers in our consumer cultures. Thus, some scholars have called for turning environmentally and socially superior products into signifiers, that is, make the hybrid Smart sexy rather than the SUV. However, this strategy may run into difficulties, if ordinary consumption really determines the major share of our environmental footprint. Moreover, it is potentially of limited effectiveness in an economic system based on mass consumption, that is, if it is not only the individual consumption choice but also the quantity and frequency of consumption choices contributing to social position.

The extent to which the social need for positioning or symbols shapes the sustainability of consumption also has an impact on the potential to persuade consumers to consume less. For decades now, scholars have pointed out that an increasing number of individuals supposedly are intentionally and explicitly choosing “downshifting” (Schor 1998), voluntary simplicity (Elgin 1993), Lifestyles of Health and Sustainability (LOHAS) (Ray 2000), or sacrifice⁸ (Maniates and Meyer 2010). Such choices correspond to the critiques of consumer culture as a source of unhappiness, depression, loneliness, and stress rather than happiness, fulfillment, and lasting contentment, which in turn appear to be supported by data showing that increases in income and belongings after a certain level do not lead to similar increases in happiness. But if consumption is a major part of social positioning (Bourdieu 1984; Veblen 1994 [1899]; Howarth 1996; Baudrillard 1998), then strategies of dropping out of the game of “competitive upscaling” (Hirsch 1977) may carry a social cost (Douglas and Isherwood 1996). Needs may be universal (Maslow 1954; Max-Neef 1991), but satisfiers are culturally specific and in the case of today’s Western societies frequently of a materialist nature, as pointed out above. In consequence, there may be a challenge to the supposed “double dividend” of downshifting in terms of a happier and at the same time more sustainable life, or rather its existence would require a societal renegotiation of markers of status (Jackson 2005).⁹ After all, the empirical data also show that happiness positively correlates with income *within* countries. Similarly, studies have shown the difficulty of “locking in” green consumption patterns given evolved cognitive dispositions (Buenstorf and Cordes 2007). Others have found that even ethical consumers are influenced by the role of “pleasure” in their shopping experiences (Johnston and Szabo 2011). Thus, highly optimistic assumptions that the alternative lifestyles described above can easily be transformed into sufficiently broad movements in a society pervasively characterized by hyperconsumption (B. Barber 2007) and a predisposition to look for a “good deal” (Ruppel Shell 2009) should be treated with some caution. Some individuals may well choose a life with less material consumption, more time, deeper social relationships, and be happier, healthier, and fulfilled. But the jury is still out on the question of the ease with which one may persuade a larger share of the population to not make use of a share of their consumption opportunities.

This leads us to the questions of the nature of change and the depth of interventions needed. Considerable improvements in the resource efficiency of consumption clearly could be achieved with a stringent steering of producers and consumers towards the most efficient available technologies and products as well as investments in further promising technological innovation. As pointed out above, however, there are strong reasons to believe that improvements in efficiency, whether by a factor of 4, 10, or any other number, are not going to suffice. In order to move towards SSC, however, radical changes would be needed. In fact, one has to ask to what extent SSC is possible in capitalist systems. Clearly, it would appear impossible in capitalist systems endlessly pursuing growth, in which increases in well-being are understood and measured in terms of levels of material consumption, and in which growth is understood to depend on mass consumption and efficiency rather than sufficiency (Princen 2005; Jackson 2009; Seyfang 2009; Lorek and Fuchs 2013).

Sustainable Consumption and Global Climate Policy

Applying a sustainable consumption perspective, the following section develops new insights on global climate and environmental policy, identifying opportunities as well as barriers to improvements in its reach and effectiveness. Due to space constraints, the discussion will concentrate only on the consumption clusters food and housing (in terms of household energy use).

Food is a major contributor to global greenhouse gas (GHG) emissions related to consumption. In the UK, for instance, food is responsible for 20% of greenhouse gas emissions (Audsley *et al.* 2009). In Finland, the food chain has been found to contribute 14% of the country's GHG emissions and agricultural processes 69% of that (three-quarters of that from raising livestock, methane emissions from beef and dairy cattle) (Virtanen *et al.* 2011). Among the food-related activities, therefore, agricultural production processes contribute by far the largest share to GHG emissions, with meat production being responsible for a large share of this. The indirect effects from food production and processing (both in the consuming region as well as in other parts of the world) are especially important, and include emissions from livestock, agriculture, and industry on water, soil, and air, waste, transport, and the overuse of fish resources (Mortensen 2006).

In terms of policy intervention, the food sector arrived relatively late on the scene as a target for measures aimed at improving the sustainability of consumption (beyond the issue of food safety) and especially GHG emissions (EUPOPP 2011). Earlier, a focus on reducing transport necessities had dominated the debate both in science and politics and especially in civil society due to the greater awareness of the carbon emissions associated with transport (Wiedmann and Minx 2008; Hillier *et al.* 2009). Thus, NGOs encouraged consumers to buy local or regional foods. From a research perspective, the findings on this aspect were more ambivalent, as local greenhouse production may be much more energy-intensive than organic production in more distant places (this does not include the transport of food by plane). Thus, while the reduction in overall transport needs clearly is necessary, the decision for the appropriate sourcing location of individual products needs to consider the specific context. Moreover, scholars have increasingly revealed the many different aspects contributing to the carbon footprint of food products, which go far beyond the

question of transport. Accordingly, the carbon labeling of groceries has come to be discussed as a potential policy tool (Vanclay *et al.* 2011). The difficulties and complexities associated with determining the carbon footprint of a food product should not be underestimated (Móznér Vetőné 2011). Nevertheless, this strategy appears promising as a means to better inform consumers about the climate change impacts of their consumption choices.

At the same time, a number of food retailers have started addressing their own carbon footprint. The activities involved range from improving the fuel efficiency of the transport fleet, to increasing the energy efficiency of store lighting as well as refrigeration and cooling in stores, to experiments with carbon footprinting of selected products in a few very advanced cases. Generally, these activities show some awareness but fall far short of addressing the most important dimensions of the climate impact of food (Fuchs and Boll 2012). Improvements in the fuel efficiency of the transport fleet are necessary, but so is the reduction in miles traveled overall, especially when it comes to miles traveled by plane. This is not necessarily in the interest of a highly concentrated food retail industry with supply chains reaching all over the globe.

Another important strategy would be the reduction of all forms of food waste, with organic waste ranging from products rejected because they lack “standard” size, shape, or color, to agricultural produce rotting before reaching markets, produce not sold in stores and groceries not used in households, as well as the additional packaging waste (Stuart 2009). Fortunately, food waste has increasingly received public and political attention. Strategies have not moved beyond awareness-raising, however, and more effective political intervention has yet to be designed and adopted.

From an SSC perspective, moreover, a reduction in the consumed quantities of certain foods would appear unavoidable. Current levels of meat as well as dairy product consumption in Western industrialized societies clearly are not sustainable and constitute major contributors to climate change (Zhu *et al.* 2006; EUPOPP 2011). This is not a change that can be easily achieved or be a politically popular objective. While the carbon labeling of food products may contribute to a reduction in meat consumption among some consumers, it would appear that more interventionist measures ranging from economic disincentives to choice editing would be needed to obtain real change (Danish Ministry of the Environment 2012). Here, public catering can play an initiating role (Wahlen *et al.* 2012). Public canteens in some cities have started to have a veggie day, that is, not offer the choice of a meat dish one day a week. Unfortunately, such a strategy can only be a start, from a climate change perspective (EUPOPP 2011).

Household energy use contributes 25% to overall GHG emissions in the EU (EEA 2011). More than half of this is indirect emissions result from heating and electricity use (EEA 2011). Globally, the impact of heating (or cooling) is highly contextual and depends on building and construction characteristics, temperatures, and energy sources. Cooling devices are major sources of energy used in the house and the primary contributors to climate change among household appliances (Bürger 2011). Communications technology currently contributes only a comparatively small share to household energy use, albeit with a strongly increasing trend (Bürger 2011). The latter is due to the ever-larger quantity of relevant appliances in households, but more importantly also to the ever-larger screen sizes of televisions, in particular.

Potential intervention strategies reach from mandatory performance standards and subsidies for energy efficient buildings, to the provision of information on optimal heating strategies, in the case of heating, for example (EUPOPP 2011). Similarly, reductions in energy used by household appliances may be achieved through subsidies for the most efficient appliances, especially when combined with relevant information, such as effective labels, and information on the energy use of existing appliances in households and on the availability and potential cost savings of more efficient appliances (Deutsch 2010; Brohmann *et al.* 2011; EUPOPP 2011; Heinzle 2012). Moreover, shifting the times of energy use may help to reduce the overall capacity needed in the system (Gölz 2011; Mert 2011).

Many instruments potentially applicable to the question of household energy consumption address the different uses of energy in general. Thus, households may be induced to reduce their energy consumption through progressive tariffs and/or energy taxes, for instance. Moreover, raising the share of renewable energy sourced in the system clearly contributes to reducing the carbon footprint of the relevant households, which can, in turn, be fostered by subsidies, green quotas, and investments in associated necessary technological innovations such as energy storage systems. Moreover, one could think about not only offering progressive tariffs in terms of the quantity of energy consumed but also in terms of the overall capacity provided at any one point. In Italy, for instance, households traditionally have 3 kW contracts, which are cheaper, but also mean that they cannot use two energy-intensive household appliances simultaneously. This may seem a rather dramatic intervention, from the perspective of other countries, in particular American households. But it does lead to real savings in terms of the energy capacity a system needs to provide at any one point in time. For the future, engineers envision “smart homes” with “smart appliances” that are supposed to help individuals reduce their energy consumption (Gölz 2011; Wahlen *et al.* 2012).

From an SSC perspective, all these may be helpful steps. However, an SSC perspective would argue that the real issues lie with ever-increasing house sizes (in which ever-fewer people live, due to demographic and cultural changes), as well as ever-growing refrigerator and screen sizes, for example. These create new energy needs, which easily eat up efficiency gains achieved via the above strategies. From an SSC perspective, therefore, it would be desirable to at least start a public debate about how much heated (or cooled) space an individual may claim as his or hers. Similarly, an SSC perspective would inquire into the societal desirability of equipping houses with private pools. Finally, an SSC perspective would argue that we have to leave the majority of fossil-fuel resources in the ground rather than think of more efficient ways to use them, as the atmosphere is the limit we face, rather than the fossil fuels themselves (Edenhofer 2011; Princen 2011). Again, these are politically far from popular questions. Yet, they do highlight the real challenges an SSC perspective on energy use in households and climate change reveals.

In terms of broader and politically even less popular questions, an SSC perspective would question the stock-market-driven nature of many food and energy corporations and the divergence of the resulting objectives from public sustainability objectives. In this context, the enormous degree of capital concentration in both sectors would also raise questions. Clearly, from the perspective of our current economic system it is hard to see why it should be in the interest of food retailers to

sell fewer meat products or in the interest of large energy companies to dramatically reduce the energy consumption of their customers. Changing the system to achieve a greater degree of convergence between public sustainability objectives and private investor/owner interests is a real challenge here.

Conclusion

This chapter has developed an SSC perspective on global climate and environmental policy. In pursuit of this objective, it has made the argument that such a perspective is particularly valuable in pointing out the fundamental challenges to our lifestyles and politico-economic system any serious attempts at achieving sustainable development will have to involve. An SSC perspective forces us to recognize the insufficiency of attempts to improve the resource efficiency of current Western consumption patterns. After decades of improvements in resource efficiency and the associated improvements in consumer information and options, we have strong evidence that resource savings achieved tend to be overcompensated by rising consumption levels.¹⁰ Thus, improving the fuel efficiency of cars is of little use if ever more people drive ever-longer distances. Similarly, improving the heating characteristics of one's home does not help if we build larger and larger homes or use the money saved on the heating bill to fly to the Maldives for vacation. WSC governance may be helpful in contributing to improvements in the sustainability of consumption, but only if it is accompanied by SSC governance. Accordingly, addressing consumption levels and their drivers needs to be the core objective of sustainable consumption governance and research.

The resulting challenges start with the need for interventions in the "rights" of "sovereign consumers." While mandatory, more relevant and transparent information may help improve the sustainability of consumption choices (which in some contexts may well mean less information), information by itself is not going to be sufficient. As pointed out above, research has shown that effective intervention requires instruments with sanctioning and enforcement potential. In addition, economic incentives will have to be readjusted to the pursuit of the public good, and, in some cases, politically unpopular measures such as choice editing will have to be taken.

Challenges associated with a pursuit of SSC reach to the need to restrict "private" economic activities, which are being used to further consumption and which have come to be "natural" accompaniments of our daily lives, such as marketing. Such steps would allow reducing the "discursive polyphony" about consumption and sustainability (Markkula and Moisander 2012), and especially the continuous, contradictory messages of "buy more" and "use less" addressed at consumers.

More fundamentally, the challenges will involve a rethinking of current methods of measuring development and well-being as well as the definition of growth as a political and societal necessity. In this context, a rethinking of and better balance between the influences of different ideas and interests in democratic politics would appear crucial. More fundamentally, classic debates on what constitutes the good life and what contributes to human prosperity will have to move back into the focus of societal and political debate (Ehrenfeld 2008; Di Giulio *et al.* 2011). In terms of politico-economic structures, SSC will require the development of alternative systems that foster socially just well-being.

None of these challenges will be easily overcome. As the past decades have shown, strong barriers to change exist. Unwillingness to pursue such fundamental reforms dominates. Political actors shy away from addressing politically costly issues; business actors have developed their business models on the basis of current incentive structures; and even NGOs depend on support from consumers. Still, alliances between NGOs and research may be able to propel societal debate and reforms forward (Fuchs and Lorek 2005; Cohen 2006). They will have to ask in what kind of societies, that is, within which politico-economic frameworks, sustainable consumption can be achieved and inquire into strategies to allow consumption to better contribute to sustainability and well-being. On the basis of answers to these questions, we will have to develop new models of sustainable societies.

Notes

- 1 For a substantial share of the global population increasing consumption is necessary to reach a level that can be called sustainable. However, a fast-growing “global consumer class” exhibiting increasingly Westernized consumption patterns exists, especially in the BRICS countries (World Watch Institute 2012).
- 2 For an elaboration see Lorek 2010.
- 3 Agenda 21 called for the adoption of sustainable consumption patterns (United Nations 1993).
- 4 Significantly, UNEP failed to effectively pursue insights from this report in the international debate (Fuchs and Lorek 2005).
- 5 Similarly, the advertising sector report (European Association of Communications Agencies 2002) did not acknowledge any potential problems resulting from advertising’s influence on consumption.
- 6 Named after the site of the first relevant international meeting after the Johannesburg summit.
- 7 Sustainable Lifestyles, Sustainable Products, Sustainable Procurement, Sustainable Building and Construction, Sustainable Education, Sustainable Tourism, and Cooperation with Africa.
- 8 See Hall (2010) for an excellent discussion of unintended, false, and hard sacrifices.
- 9 Findings that even green consumers relate their shopping to the experience of pleasure and insights gained by neurologists into the influence of consumption on brain activity may further provide indications of this challenge.
- 10 The so-called rebound effect partially explains this dynamic, but overall sources are more complex. Note, however, that the rebound effect is also more complicated than often assumed (Hertwich 2005).

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