Strong Sustainable Consumption Governance – precondition for a degrowth path?¹

Sylvia Lorek¹ and Doris Fuchs²

¹Sustainable Europe Research Institute, Germany;

²University of Muenster, Germany

Abstract

This paper aims to link two debates and literatures at the cutting edge of sustainable development research and governance: sustainable consumption and degrowth. Interestingly, these literatures have only recently started to exchange and integrate insights, despite their similar interest in the fundamental systemic challenges to sustainable development arising from a political discourse favoring (green) growth and the recognition of the insufficiency of technological solutions. The paper argues that this lack of connection is due to a predominance of perspectives in sustainable consumption research and governance that fail to deliver as promised. These perspectives, which we summarize under the label of "weak consumption" perspectives, focus almost exclusively on questions of efficiency gains. They therefore are not able to address the challenges to sustainable development arising from overconsumption in general or the rebound effect in particular. In contrast, a strong sustainable consumption perspective provides a basis for both, a promising inquiry into the linkages between consumption and sustainable development and fruitful exchange with de-growth. It is based on an inquiry into levels and patterns of consumption and thereby allows the delineation of relevant scientific and political implications for the de-growth debate and literature.

Keywords: sustainable consumption, degrowth, policy instruments, NGOs

¹ Under review.

1

1. Introduction

Humanity is facing a variety of serious sustainability challenges. On the environmental side, we face global warming and resource scarcity. On the social side, we observe increasing inequity. At the same time, a reliance on growth, innovation and technological solutions builds a locked-in situation in a system, hindering an effective targeting of these challenges if not contributing to them. Beyond the effects on humans themselves, further burden is placed on the biosphere and biodiversity. All this calls for radical changes (Tukker, 2008). This paper strives to sharpen the discussion on how radical the changes have to be.

Our starting point in the paper is the assumption that the sustainable consumption and degrowth debates and literatures should have something to say to each other. After all, both address fundamental and similar challenges facing humankind. Yet, there is little explicit exchange between the relevant communities so far. This fact, however, is less surprising if we take a close look at the overall development in sustainable consumption research and governance. Both tend to focus on efficiency gains in resource consumption, in our terms "weak sustainable consumption." A weak sustainable consumption approach, however, is severely limited in providing solutions to today's sustainability challenges due to its lack of attention to questions of justice, its inability to deal with the rebound effect and its simple trust in technological solutions, for example.

In this paper, we therefore define and advocate a strong sustainable consumption perspective. Such a perspective addresses overall levels and patterns of consumption, looks beyond the market to integrate the social dimension of well-being, and demands an assessment of necessary changes based on a risk-averse approach. At the same time, a strong sustainable consumption approach speaks directly to the core interests of the degrowth debate. In fact, both approaches depend on each other. Strong sustainable consumption governance as a comprehensive approach to the pursuit of sustainable development is a precondition for degrowth. At the same time, strong sustainable consumption governance will not be achievable without a societal acceptance of degrowth. The implications for research and governance arising from a strong sustainable consumption perspective, therefore, offer a promising basis for a fruitful exchange between the sustainable consumption and degrowth debates and literatures.

Before starting, let us point out, what we mean when we talk about sustainable consumption. Both scholars and political decision makers frequently tend to use sustainable consumption with different meanings in mind, thus further blurring the debate. In this article, sustainable consumption is used to refer to sustainable resource consumption, taking into account the

complete product life cycle.² In this context, the term stands for limiting the consumption of depletable resources, often via more efficient use or by their substitution with renewable resources and the use of renewable resources limited to their reproduction rate. Sustainable resource consumption involves the consumption patterns of industries, governments, households, and individuals (United Nations 1992).

The article proceeds as follows. The next section delves into the sustainable consumption debate and literature. It highlights the limited focus of much of sustainable consumption research and governance on weak sustainable consumption and reveals the shortcomings of such a perspective. It then develops a strong sustainable consumption perspective and delineates its characteristics and promise. Section three, then, points out the implications of a strong sustainable consumption perspective for research, while section four does the same for governance. Section five concludes the article by summarizing again the insights a strong sustainable consumption perspective can provide for degrowth research and governance.

2. Sustainable Consumption – Separating the Wheat from the Chaff

One of the early conferences on sustainable consumption, the so called Oslo Symposium held in 1994, defined sustainable consumption as

... the use of services and related products which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life-cycle so as not to jeopardise the needs of future generations.

(Norwegian Ministry for the Environment, 1994)

This definition was taken up in the Sustainable Consumption Work Programme of the UN Commission on Sustainable Development (CSD) (UN Commission on Sustainable Development, 1995). Countless governmental and non-governmental meetings and publications since then refer to this definition. According to it, sustainable consumption seeks to achieve a high ratio of basic need fulfilment per resource use or, in other words, is an effective contribution to human well-being per resource use. This is important as in the

² Alternatively, Sustainable Consumption can be used in the sense of macro economics as an aggregate term for public and private consumption. In this context it focuses on the demand by public and private households and their responsibility for the ecological consequences of consumption decisions. However, this use neglects the responsibility of business and industry and awards them the function of mere providers of consumption options (European Commission 2008). Similarly, Sustainable Consumption can be limited to private consumption only, as reflected in the concepts of sustainable household consumption or sustainable consumption behaviour (Thorgersen and Ölander 2003; von Geibler, Kuhndt et al. 2004; Lucas, Brooks et al. 2008). Here, emphasis is given to case studies and single product advice to consumers.

practical promotion of sustainable consumption quite frequently the products and services, their optimisation and marketing are getting the main attention. Yet, such a focus is utterly insufficient to understanding and fostering sustainable development.

2.1. The Chaff

Most activities in the context of sustainable consumption concentrate on the aspect of product efficiency. Emphasis is given to best practice and single product advice to consumers. As a result of the narrow focus on commodities, on products and services, one of the major elements of today's sustainable consumption discourse is to encourage consumers to play their roles as active market actors and to take responsibility to buy green or more sustainable products (European Commission, 2008). In this vein, the documents of the European Commission, such as its "Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan" (European Commission, 2008), for instance, talk about "smarter consumption", "better products", as well as "global markets for sustainable products".

This sustainable consumption concept is referred to as SCP. While officially this serves as abbreviation for 'Sustainable Consumption and Production', it reflects a focus limited to 'Sustainable Consumer Procurement', in fact (Fedrigo and Hontelez, 2010). The assumption is that several green and sustainable alternatives are available on the market and that production of these alternatives should be supported and encouraged by consumers through their purchasing decisions. Increasing demand, then, should induce innovation for more sustainable products and services. This is supposed to lead to changes within the current economic system towards sustainable growth (Ricci, 2008) or green growth (OECD, 2010).

The appearance of such a perspective on sustainable consumption should not come as a surprise. It is rooted in the fact that the task of working on SCP in opinion-leading countries tends to rest in national ministry departments that formerly dealt with integrated product policy (IPP) (Rehfeld et al., 2007; Rubik and Scholl, 2002; Scheer and Rubik, 2006). As a result, the perception of sustainable consumption as an aspect of product policy is quite understandable.

There is indeed some evidence that changes in consumer demand can lead to changes in the markets, of course. Water saving appliances and so-called "white goods" like washing machines and refrigerators are typical examples here. Still, other appliances like TV sets, for which other criteria than efficiency are major selection factors for consumers, have failed to become less resource consuming over time. Without doubt such a product-based (and partly

service-based) approach relying on technological development and its success in the market is a necessary step towards sustainable consumption.

However, this approach has major shortcomings as well. A first shortcoming is that the approach fosters change within the boundaries of specific products and does not consider economy wide effects (Graus and Worrell, 2009). It concentrates on relative improvements, but does not refer to absolute limits such as those for CO₂ emissions at a country, regional or global level. A second drawback is the monetary aspect. Via the rebound effect (Berkhout, et al. 2000; Binswanger, 2001; Greening et al., 2000), the money saved — for instance through improvements in the energy efficiency of a given electric appliance — tends to be spent on other items, such as other electric goods (EEA, 2006). In other words, consumption continues at the same or even a higher level. Additionally, due to economic growth in general, more money is available to be spent and obviously, each euro, dollar or other currency spent is related to additional resource use. Third, such an approach neglects that along with the increasing consumption in developed countries global demand is growing due to the Earth's growing population in general and the over consumption of the growing global consumer class. Thus, the 'fair share' of available resources for each actual and future person on Earth is constantly shrinking. Finally, such an approach substantially overestimates the potential for environmental consumer activism both from a supply and demand perspective (Fuchs 1998, 1999, Fuchs and Arentsen 2002).

The biggest problem, however, with such an approach appears to be the blind confidence in future technological solutions, which are supposed to help solve the problems of resource scarcity, first of all the problem of energy provision. Considering the ecological challenges we face, slight adjustments within the system, which rely mainly on technological solutions and a product-based sustainable consumption approach, run the risk of encountering long expected disasters from a peak in oil supply to climate change sooner or later. At best, this approach can postpone disasters (Garner, 2000). In fact, it is a greening approach for selected products, for some individuals or a few lifestyle groups rather than a coherent and comprehensive concept for sustainable development (Hartmann, 2009). We therefore argue that scientific perspectives and governance approaches limited to promoting the choice of products and services that are either less burdening for the environment or less destructive for the people actually producing them (fair trade aspects) can only be weak sustainable consumption (wSC) perspectives and approaches.

2.2. The Wheat

The shortcomings of the product-based approach to sustainable consumption have been widely discussed in the rich academic literature on sustainable consumption. Several edited volumes (Cohen and Murphy, 2001; Jackson, 2006; Noorman and Uiterkamp, 1998; Princen et al., 2002; Røpke and Reisch, 2004; Westra and Werhane, 1998), special issues of academic journals (Ecological Economics, 1999; International Journal of Consumer Studies, 2009; International Journal of Innovation and Sustainable Development, 2007; International Journal of Sustainable Development, 2001; Journal of Cleaner Production, 2007; Journal of Industrial Ecology, 2005) and countless individual books and conferences include contributions highlighting the systemic weaknesses of the "weak" SC approach and emphasise the need for an approach of strong sustainable consumption (sSC), i.e. an approach focussing on the reduction of overall resource consumption instead of atomized individual consumption as the guiding perspective (Cohen, 2010; Fuchs and Lorek, 2005). If we take ecological boundaries seriously, our consumption patterns face various challenges from climate change via the limits and overuse of resources to the reliability of easy technological and win-win solutions in solving our problems (Lorek, 2010). With foreseeable limits of (cheap) oil and a lack of alternatives, our energy based highly industrialized and globalized lifestyle is obviously under strain. It is not just a matter of how to produce goods with less energy or how to transport them around the globe. These boundaries challenge our (suburban) lifestyle, i.e. where and how we live, work, recreate and shop. In the sense of sustainable resource consumption, then, sSC governance has to induce significant changes in the consumption patterns and levels of industries, governments, households and individuals (United Nations, 1992).

As a normative approach, the most challenging point for sustainable consumption governance is the effective provision of human well-being. As such, sustainable consumption needs to be linked to the question of the good life (Di Giulio et al. forthcoming). In practice, this means that we have to consider the quality of services and the degree to which they meet human needs. The well-being effect can be expected to be quite high, when the service or product fulfils basic needs like food or shelter. It can just as clearly be expected to be less high, if the service is one's 20th pair of shoes, however efficiently and fairly they might have been produced and traded. Sustainable consumption implies channelling resource use towards those consumers where marginal utility is highest. This indicates, in turn, the need to ensure that reductions in material consumption fall on those with the lowest marginal utility of consumption, the wealthy (Beddoe et al., 2009).

This is why we take what was formerly called a "Northern" perspective (Galbraith, 1958; Schor, 1998) and is nowadays called the perspective of the global consumer class. We are

talking about the reduction of consumption and the environmental and social burdens that consumption causes (Dauvergne, 2008). The situation of those people with low consumption capacities (Sen, 1999) is taken into account in the argumentation in so far as the reduction targets of the affluent have to be high enough to leave resources and ensure sustainable consumption for the poor, too. At this point at the latest, it becomes obvious that a sSC perspective necessarily goes hand in hand with the degrowth perspective. But let's stay with the argument for a sSC perspective, for now.

An sSC approach means giving specific attention to the levels and patterns of consumption. Its central focus are the resources available and the manner of their distribution among the Earth's population. In this sense, the sSC concept refers back to the roots of the Rio conference in 1992: environment and development. Moreover, an sSC approach reaches beyond consumption as an economic activity taking place in markets based on monetary values and conceives well-being as much more independent from material commodities (Layard, 2005; Marks et al., 2006; Røpke, 2009). It will reflect on the way time is used, for instance (Jalas, 2002; Maniates, 2009; Spangenberg and Lorek, 2002). In turn, sSC governance will rely much more on activities like neighbourhood exchange, community or subsistence work and aim to increase human well-being through social structures (Hofstetter and Madjar, 2003; Manzini and Jégou, 2003). The sSC concept thus involves social dimensions and helps to integrate questions of social coherence or gender issues, for example (Schultz et al., 2001). Further on, it considers people not only in terms of their function as consumers, but as citizens as such and accepts the social embeddedness of consumption decisions. In sum, an sSC perspective helps to build a bridge between individual consumption and resource management (Mont and Bleischwitz, 2007). Additionally, it overcomes the partly artificial distinction between production and consumption. At the same time, an sSC perspective underlines that real sustainable consumption governance presuppose radical changes, social innovations and thinking out of the box. As Hunter phrases it: simple things won't save the world (Hunter, 1997).

On the political level, the most remarkable approach pointing in the direction of sSC governance is laid out in the UNEP publication "Consumption Opportunities" (UNEP, 2001). There, efficient consumption (dematerialisation) is explicitly distinguished from different consumption (changing infrastructure and choices), conscious consumption (choosing and using more consciously), and appropriate consumption (questioning levels and drivers of consumption). In doing so, the report explores perspectives on sustainable consumption beyond the weak one and points to steps necessary to complement the product-based dematerialisation strategies to which wSC Governance is limited. On the scientific level, the sufficiency concept elaborated in the sustainable consumption literature – as well as in the

degrowth debate – fits this context of strong sustainable consumption quite well. It complements the efficiency approach in so far as it not only asks how to do things right (Hanley et al., 2008), but how to do the right things (Sachs et al. 1998). In other words, there can be enough and there can even be too much (Princen, 2005). But sufficiency interpreted as an individual approach does not carry far enough. Princen argues that the idea of sufficiency can be an organising principle for society (Princen, 2005) and thus comes close to a degrowth approach. Such a structural perception of sufficiency does indeed seem to be necessary. Alcott points out that resource consumption avoided through individual acts of sufficiency is quite likely made up by other groups of the emerging consumer class and does not increase the amount available for those who need an increase in consumption most (Alcott, 2008; Beddoe et al., 2009). A practical experiment with sSC governance, in turn, is the voluntary simplicity movement (Doherty and Etzioni, 2003; Elgin, 1993; Maniates, 2002), which has recently gained attention in marketing concepts such as LOVOS "Lifestyle of Voluntary Simplicity" or voluntary downshifting (Hamilton, 2009). These approaches form an important contribution to sSC governance in affluent, over-consuming population groups.

All this may create the impression that strong sustainable consumption is about voluntary personal sacrifice. Yet, this would be to misinterpret the concept. Two arguments may be given against this. While personal values — as well as cultural and societal ones — do indeed play a vital role in sSC, the focus of the argument is on the structural changes that are required. This is where governance becomes important. Several scientific approaches have already started to explore these kinds of substantial structural changes that seek to go beyond the inclusion of external costs into prices or other market-related approaches. Such attention to the need for structural changes is reflected in the concepts of System Innovation (Tukker, 2008), Evolutionary Economics (Boulding, 1991), or Critical Realism (Archer, 1998; Bhaskar, 1978; Lorek, 2010), for example. Additionally, a strong focus is given to the perspective that – as soon as some basic material need fulfilment is ensured – further, non material factors gain increasing importance for human well-being like safety, belongingness, social coherence, equity, and social relations (Rauschmayer et al., 2008; Scitovsky, 1992).

To summarise the discussion above, a pay-off matrix comparing the alternative approaches for Sustainable Consumption in times of environmental uncertainty shall illustrate the different consequences of weak and strong sustainable consumption governance (Figure 1). Borrowing from Costanza (Costanza, 1989), we suggests that in order to reach sustainability in the context of insecure technological development we should strive for the best in technological innovation, while maintaining a pessimistic view and pursuing risk averse policies, at the same time. Only in this way, can we avoid disaster in the case that

technological innovation fails to deliver solutions allowing a balanced living for most people on earth. It is a pathway worth pursuing, even if it is at the price of only moderate (economic) development.

Figure 1. Pay-off matrix for governance approaches in the face of environmental uncertainty

		Living situation for the global population	
		Technology can solve the problems	Technology can't solve the problems
governance approach	Weak Sustainable Consumption Governance	High material standard of living for some. Less poverty for others?	Living in misery for most
	Strong Sustainable Consumption Governance	High human well-being for most	Balanced living for most

Adapted from (Costanza, 1989)

Following from the above discussion, sSC is clearly linked to degrowth. Yet few sustainable consumption scholars are actively relating their research to the degrowth discourse and even fewer have published about it so far (Hall, 2009; Kallis et al., 2010; Latouche, 2007). The broad majority still shies away from making an explicit connection (Hinterberger et al, 2009; Jackson, 2009; Zaccai, 2007). Such a strategy may help not to frighten business and politics, consumers and citizens, while still building a bridge between necessary ecological insights on one hand and the force of inertia on the other. Yet, making the link explicit is necessary to sharpen our common insights and debate. In the following, we delineate the implications of an sSC perspective for research and governance, thereby aiming to provide a basis for a fruitful exchange with the degrowth community.

3. Implications of the sSC perspective for research

The insights gained from research as well as from political discussions on sustainable consumption indicate that there is no lack of knowledge in general regarding the necessary direction for our consumption patterns, at least not regard the ecological dimension: nutrition, housing and mobility have to be organised in a more sustainable way. Even the proponents of weak sustainable consumption generally target their measures in that direction. Only they

tend to be too tentative. However, two other aspects have been undervalued so far. One is how to implement measures properly and the second is the speed with which changes have to take place.

To start with the latter, to increase the speed of change, research has to increase the sense of urgency and to make the need for action and implementation more visible. Therefore, it has to come up with clear and time-bound targets of what has to be reduced by when if we want to remain within our ecological limits. What has been developed in the debate on climate change has to be adapted in other areas, too. Scientifically solid targets have to serve here as orientation points for political and societal development (EEA, 2008).

To help with implementation, it seems that we have to overcome the barriers presented by mainstream thinking which is dominated by economic reasoning, today. An important contribution here is the development of alternative ideas about how to measure and communicate what contributes to human well-being. While the need for such measures is increasingly recognised (European Communities, 2007; New Economics Foundation, 2009), further substantial research is needed to find solid answers (Stiglitz et al., 2009).

This is where the scientific and partly political discourses on sustainable consumption and degrowth (Flipo and Schneider, 2008; Hinterberger et al., 2009; Kallis et al., 2010) should link up, in particular. Both strains of research could help to overcome the reservations of proponents of wSC to economic shrinking and their trust in green growth. Research on this topic is overdue (Lorek, 1993), as it has the potential to develop scenarios showing that a shrinking economy does not have to lead to social decline (unsustainable degrowth) and that happy degrowth with an increase in or at least stability of well-being is possible (Bilancini and D'Alessandro, 2010; Jackson, 2009; Spangenberg, 2010a; Spangenberg, 2010b).

Research is also needed regarding the social aspects of sustainable consumption. Two aspects in particular appear to have been elaborated insufficiently so far. First, various practical experiences of how to organise consumption and lifestyles in a sustainable way are carried out at the micro level. Structured investigations on how to shift those social innovations from the micro to the macro level could be improved (Manzini and Jégou, 2003; Seyfang, 2009). Second, for the full assessment of goods and services within the context of sustainable development, social and socio-economic life cycle assessment (LCA) should complement the environmental one. While a first approach has been made to develop guidelines for such an approach (UNEP, 2009), there is an urgent need for carrying out such LCAs empirically. Finally, NGOs need support from research in the form of guidance, not only on what to effectively campaign for or demand from policy making, but also on how to best achieve political influence. New and better strategies of lobbying and campaigning

might develop more quickly, if there were closer cooperation between science and practice (Tunçer et al., 2009)

4. Implications of sSC perspective for governance towards degrowth

Beside further research along the lines developed above, it is mainly political and societal change that is needed. The following 6 aspects seem to be most crucial, without claiming to cover the full picture.

4.1 Heading the adverse wind

One of the major challenges for strong sustainable consumption – as for degrowth – is that it is not in line with the dominant political and societal worldview, mainly the belief in economic growth as recipe to cure all ills. In this line, G20 meetings argue that it is growth which has to be sustained (Group of 20, 2009). And so do countless other high level political documents such as the Lisbon Treaty, in which concern about growth appears frequently, while consumption only appears in the context of the 'strengthening of private consumption in phases of weak economic growth'. For a few months following the economic crisis in autumn 2008, there was some hope that the investments promised by all state leaders would steer development towards more sustainability. But while Korea, for example, had more than 80% of ecological investments in its stimulus package, the EU countries had only 5-10%. However, the attempt to merge sustainable consumption with the financial debate should not be given up (Cohen, 2007).

Sustainable consumption is not a topic on high-level political agendas and if it is, it is in the form of weak sustainable consumption, as that perspective does not contradict mainstream thinking. Accordingly, considerations of sustainable consumption are missing in precisely those institutions that contribute most to shaping patterns of consumption, like the WTO and big business organizations. With its explicit reservations on economic growth, strong sustainable consumption is hardly in the short-term interest of powerful actors.

The lack, if not total absence of, support from powerful actors also limits the focus of those organizations which have taken up the challenge of sustainable consumption. As a result, they frequently steer the discussion to 'harmless' topics. An attempt to at least start a discussion on systemic changes within the Marrakech Process headed by UNEP/UN DESA through including agenda setting activities on "topics too hot to handle" in the 10 Year Framework of Programmes failed immediately (SCORE Network, 2008). The OECD, as

another example, is still devoting huge efforts to exploring the willingness to pay for more sustainable goods and services (OECD, 2009). The results, specifically the quite limited willingness to pay, manly show the helplessness of those, who are trying to solve the problems within the system.

A variety of starting points for heading the adverse winds exist. Thus, challenges to growth as a measure of development have existed in the development community for a while. Recently, they have been strengthened by new foci on happiness and well-being (Fuchs et al. 2009). Clearly, these alternative approaches are still far from becoming the political and economic mainstream. Nevertheless, linking up different challengers to the dominant winds may help turn individual gusts into a storm.

Nevertheless, the barriers and adverse winds hindering strong sustainable consumption do not change at all the ecological and social facts that we are facing. But they do have to influence strategies how to approach them.

4.2 Carrot and stick to stimulate the public debate

First of all, those promoting a strong sustainable consumption approach should better differentiate between 'weak' and 'strong' forms in order to structure the debate more clearly. Explicitly, they have to be aware and argue that degrowth is not a 'worst case scenario', but a tactic strategy to avoid an (eco-) system collapse. Latouche compares a planful degrowth strategy with a 'healthy diet voluntary undertaken to improve personal well-being', while negative economic growth can be compared to starvation (Latouche, 2010).

To open up the debate to a broader audience, including the public as well as policy makers, a two-pronged strategy is necessary: that is, a carrot and stick approach. The stick in this case is to create a sense of urgency. This means promoting the idea that reducing consumption is not an option, but is going to come anyway. There are evident ecological limits that we can either actively anticipate or passively allow to overcome us. In any case, limits will substantially harm economic growth. Ensuring a soft landing instead of a hard one solely depends on the ability of proponents of sSC and degrowth to get the message across in due time. As has already been developed for climate change, we need clear and scientifically conclusive scenarios about how our lives will be influenced by resource scarcity and especially the peak in oil supply. Those scenarios have to highlight the social costs of inaction and the risks for social security from a local to the global level. On this basis, sustainability targets have to be developed regarding how to stay within these ecological

limits, including time tables for what to reach by when and who has to contribute what. Research can (only) provide the first step here. Societal agreements on how to act on these recommendations as well as the control over the decisions made are the task of governance processes and thus of governments. Early November 2010, an NGO coalition was set up in Hungary with exactly the purpose to establish a policy process for capping resource use (CEEweb for Biodiversity, 2010).

A promising approach, at least in terms of clearly indicating how the general impact of consumption is developing, is being constructed by the European Environmental Agency. Their indicator set for sustainable consumption explicitly strives to answer questions like 'Is the environmental pressure activated by consumption sustainable?' (Watson et al., 2010) Assuming they will take an indicator like the Ecological Footprint to answer the question, the target is implicitly given: restricting the resource use per year to the annual production and sink capacity of the planet.

The carrot in this case is to better bring to attention that a shrinking of economic processes is not as much a disaster as mainstream economics suggests. Well-being in developed countries has for a long period already been successfully decoupled from economic growth. This needs to be communicated more offensively. Alternative measures of well-being (New Economics Foundation, 2009; Stiglitz et al., 2009) can help to overcome growth addiction (van Griethuysen, 2010). It is important to better highlight other elements of well-being than increasing material consumption. Examples like the US initiative "Take Back Your Time" for reducing working hours and extended holidays are a valid contribution to sSC governance without explicitly focusing on consumption (Maniates, 2009, 2010). Also, a public discourse on happiness can help to consider the limitations on increasing human well-being through material consumption as soon as it reaches and goes beyond a certain level of need fulfilment (Hofstetter and Madjar, 2003; Layard, 2005).

4.3 Demanding responsibility of governments in governance

The actual debate on sustainable consumption in political circles shows the same epistemic fallacy as the discussions about the priority fields of action on sustainable consumption did ten years ago. All tend to use the policy strategy of information provision. There is ample evidence that hard policies like regulatory instruments and economic instruments are most effective (ASCEE team, 2008; Lorek et al., 2008; Rehfeld et al., 2007). This message is as strong as the message "care for the consumption clusters food, housing and mobility". While the latter is accepted, the former is still widely ignored. Instead huge efforts are made again

and again to increase informational instruments. The policy instrument of information provision, however, appears to be as ineffective in the policy instrument canon as the call to switch off stand-by appliances in the debate about sustainable consumption priorities. Scientific insight on the effectiveness of policy instruments obviously must be communicated to political decision makers in a more convincing way. This includes governments' responsibility to phase out unsustainable consumption options (Church and Lorek, 2007) or choice editing as it is called lately (Maniates, 2009).

Another delay in taking action towards sSC governance is caused by the retreat of government in favour of governance. The governance approach, i.e. the integration of non-state actors in policy design and implementation (for example, in the development of Sustainable Consumption Strategies or Action Plans) can work well, under certain conditions.³ However, the incomplete implementation of the agreements produced by such strategies frequently makes the efforts needed for their development rather questionable. Whatever governance processes come up with, control over the follow up and its implementation is the task of governments. They have to ensure that contributions to reach agreed targets dedicated to specific actors are indeed carried out. As long as national governments understand their roles in the governance of sustainable consumption as one of providing opportunities for the exchange of opinions and voluntary commitments that are not controlled, a significant drive towards sSC governance will fail to materialize (Berg, 2006).

4.4 Appreciating the potential of social innovation

Important incentives for strong sustainable consumption are quite likely to come from social innovation. Countless initiatives are on the way from food co-operatives to public gardening, the provision of services with an explicitly sustainable character, neighbourhood centres, and alternative, local currencies (Seyfang, 2004, 2007, 2009). The societal movements on degrowth, mainly the practical experiments in southern Europe, similarly provide a fruitful basis for further development (Cattaneo and Gavald, 2010; Lietaert, 2010). The potential of such approaches remains insufficiently explored. But on closer examination, they are development projects for the global North, which can have the same model role as traditional development projects have in the global South (Lorek, 1996). What is needed is to bring successful experiments from the micro to the macro level. This is not restricted to the question of how to multiply such approaches, but more about how to establish political macro structures to foster this (Löwe, 2009).

_

³ For a critical perspective on (global) governance, see Hewson and Sinclair 1999, Fuchs 2007.

4.5 Utilizing the advantages of multi-level governance

Sustainable consumption is a typical field where success depends on activities on all levels of governance. The challenge is to ensure a proper exchange between them. The actions at different levels need to be coordinated so that ambitious local initiatives are supported by national and international institutions and can feed back their results and experiences into national and international processes. If there is no coherent linking between the different policy agendas, ambitious local projects are no more likely to make a significant contribution to sSC governance than the high-level talk shops currently existing in the global context. Coherent positioning and linking is necessary from the local to the global level and back (Lorek, 2005). Thus, timely information about the political processes is as necessary at the grassroots level, as a valid pool of examples from local initiatives is needed to inspire national and international governance in pursuit of sustainable consumption. This requires the engagement and responsibility of those representing the different stakeholders in the higher level panels.

4.6 Sharpening NGO strategies

Non Governmental Organisations, especially those working on the environment, development, and consumer issues, need to distance themselves from 'weak' sustainable consumption and from addressing consumers merely as consumers, rather than as citizens. To foster acceptance for such policies, NGOs have an important, more strategically oriented role to play than they have adopted so far (Akenji, 2007). Increasingly this is a catalyst role, as they don't have massive resources to implement many initiatives themselves. What NGOs can do is bring people together and inspire them. They are in a key position to induce societal debate and awareness regarding the steps needed to reach strong sustainable consumption and make a degrowth path acceptable. Communication and discourse are basic conditions for fostering the changes required. NGOs can hardly be replaced in developing values and visions of sustainable consumption and fostering citizen engagement (Lorek and Lucas, 2003; Spangenberg and Lorek, 2003). The more complicated the issue, the more important it is to take up the catalyst role. Only in this way can politics be brought back to sustainable consumption instead of greening the market. Such a vision and value building role is required even more, as the research on the influence of aspirations and priming on personal and societal well-being shows that acceptance of degrowth policies in the population is not given for the time being (Matthey, 2010).

As part of the strategic re-orientation, environmental campaigning has to overcome the habit of promoting sustainable (in fact green) consumption. Instead of encouraging individuals to adopt simple and painless behavioural changes that have highly questionable potential – as has recently been seen with the LOHAS movement (Lifestyle of Health and Sustainability) – an alternative approach to motivate pro-environmental behavioural change is required in order to get people to engage in more significant changes. Such an approach no longer draws on analogies from marketing strategies, but rather on political strategies articulating what it stands for and which values it is driven by. Studies already confirm that an appeal to environmental values is more likely to lead to a spill-over into other pro-environmental patterns of behaviour than an appeal to financial self-interest or social status (WWF-UK, 2008, 2009).

Those who have already worked on sustainable consumption issues for a longer period of time may benefit from convincing other local and national NGOs of the relevance of sSC for their current field of work. For a broad majority of NGOs, there is still a lack of clear understanding about the emerging challenges of the issue (Church and Lorek, 2007). Most NGOs working on isolated topics such as energy or food, voluntary simplicity or cleaner production can be connected to a sustainable consumption perspective. The link just has to be made visible (Barber, 2007)⁴. This awareness that their different tasks have a common goal can strengthen their voice and their potential to bring about change. After such a strategic re-orientation, the possibility to work jointly towards a degrowth path seems much more likely.

Increased political effectiveness also has to build on improved coalition building by environmental NGOs with other civil society organisations such as academia or trade unions. Experience shows that lobbying efforts are more successful if they bundle various arguments from various groups of society. Besides backing up each other in content and argumentation, academia can be supportive of NGOs in another sense. Science can help to improve NGO effectiveness in pointing out gaps in the strategies that NGOs are using and suggest improvements.

_

⁴ The same seems to be true and useful for the different stakeholders on the governmental side, overcoming the narrow thinking within the boundaries of government departments

5. Conclusion

In this article, we have aimed to develop a basis for a fruitful contribution of the sustainable consumption literature and debate to the degrowth literature and debate. As a first step, we have identified the strong sustainable consumption perspective as the relevant part of a sustainable consumption focus. We have shown that the strong sustainable consumption perspective is highly relevant for the degrowth debate and literature due to its ability to address the core challenges to sustainable development arising from overconsumption, the highly asymmetric distribution of resource use, and the normative underpinnings of the current growth model, in particular technological optimism. Degrowth is impossible to achieve without a turn towards strong sustainable consumption. At the same time, the potential for strong sustainable consumption governance depends on a much better societal acceptance of degrowth. As such, strong sustainable consumption research and governance can strengthen the arguments for degrowth, and vice versa.

Of course, this article could only provide a first step towards an improved exchange between the two debates and the creation of a common basis for learning. The expansion of this inquiry and subsequent discussions in broader for aare highly necessary. Yet, we hope to have provided a ground for a substantial rise in mutual interest and debates.

References

- Akenji, L. (2007). Organizational Development And Sustainability Of Non-Governmental Organizations In Central And Eastern Europe. *CEU Political Science Journal*(03), 319.
- Alcott, B. (2008). The sufficiency strategy: Would rich-world frugality lower environmental impact? *Ecological Economics*, *64*(4), 770-786.
- Archer, M. (1998). Critical Realism: Essential Readings: Routledge.
- ASCEE team. (2008). *Policy Instruments to Promote Sustainable Consumption*. Brussels, Heidelberg, Oslo: IES, IÖW, SIFO.
- Barber, J. (2007). Mapping the movement to achieve sustainable production and consumption in North America. *Journal of Cleaner Production*, *15*(6), 499-512.
- Beddoe, R., Costanza, R., Farley, J., Garza, E., Kent, J., Kubiszewski, I., et al. (2009). Overcoming systemic roadblocks to sustainability: The evolutionary redesign of worldviews, institutions, and technologies. *Proceedings of the National Academy of Sciences*, *106*(8), 2483.
- Berg, A. (2006). Innovative Governance or Outsourcing Politics? Discussing European forerunner cases of sustainable consumption and production Paper presented at the The Ninth Biennal Conference of the The International Society for Ecological Economics, Ecological Sustainability and Human Well-being.
- Berkhout, P. H. G., Muskens, J. C., and W. Velthuijsen, J. (2000). Defining the rebound effect (Vol. 28, pp. 425-432): Elsevier.
- Bhaskar, R. (1978). A Realist Theory of Science Brighton: Harvester Press.
- Bilancini, E., and D'Alessandro, S. (2010). Long run Welfare under Externalities in Consumption, Leisure, and Production: A Case for Happy De-Growth vs. Unhappy Growth. Paper presented at the ISEE 2010 Conference: Advancing Sustainability in a Time of Crisis, Oldenburg, Germany, 22 25 August 2010.
- Binswanger, M. (2001). Technological progress and sustainable development: what about the rebound effect? *Ecological Economics*, *36*(1), 119-132.
- Boulding, K. E. (1991). What is evolutionary economics? *Journal of Evolutionary Economics*, 1(1), 9-17.
- Cattaneo, C., and Gavald, M. (2010). The experience of rurban squats in Collserola, Barcelona: what kind of degrowth? *Journal of Cleaner Production, 18*(6), 581-589.
- CEEweb for Biodiversity. (2010). Call to Establish a Coalition on Resource Use. Budapest, Hungary.
- Church, C., and Lorek, S. (2007). Linking policy and practice in sustainable production and consumption: an assessment of the role of NGOs. *International Journal of Innovation and Sustainable Development*, 2(2), 230-240.
- Cohen, M. (2007). Paper presented at the Framework for Action for Sustainable Consumption and Production (SCP) in the fields of Food, Mobility and Energy/Housing, Milano, Italy, 29.-30. November 2007.
- Cohen, M. (2010). (Un)sustainable Consumption and the New Political Economy of Growth. In K. Eckstrom and K. Glans (Eds.), *Beyond the Consumption Bubble* (pp. 174-190): Routledge.
- Cohen, M. J., and Murphy, J. (2001). *Exploring Sustainable Consumption: Environmental Policy and the Social Sciences*: Pergamon.
- Costanza, R. (1989). What is Ecological Economics. Ecological Economics, 1(1), 1-7.
- Dauvergne, P. (2008). The shadows of consumption: MIT Press, Cambridge/London.
- Di Giulio, A., B. Brohmann, A. Fischer and D. Fuchs. (forthcoming) "Bedürfnisse und Bedürfnisfelder". In R. Kaufmann-Hayoz, A. Di Giulio and R. Defila. Nachhaltiger Konsum Vom Wissen zum Handeln. Bern.
- Doherty, D., and Etzioni, A. (2003). *Voluntary simplicity: responding to consumer culture*: Rowman and Littlefield Pub Inc.
- Ecological Economics. (1999). Special Section: Consumption and Environment. 28.
- EEA. (2006). Household consumption and the environment. Copenhagen.
- EEA. (2008). *Time for Action Towards Sustainable Consumption and Production in Europe*. Summary of the conference, Ljubljana, Slovenia: European Environmental Agency.
- Elgin, D. (1993). Voluntary simplicity: Toward a way of life that is outwardly simple, inwardly rich: Harper Paperbacks.
- European Commission. (2008). Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan. Brussels, COM(2008) 397/3.
- European Communities. (2007). Beyond GDP Measuring progress, true wealth, and the well-being of nations, Brussels, 19.-20.11.2007.

- Fedrigo, D., and Hontelez, J. (2010). SCP: An Agenda Beyond Sustainable Consumer Procurement. *Journal of Industrial Ecology, 14:1 (accepted for publication).*
- Flipo, F., and Schneider, F. (2008). First International Conference on Economic De-growth for Ecological Sustainability and Social Equity, Paris, 18.-19. April 2008.
- Fuchs, D. (1998). Societal Determinants of Consumer Activism. A Critical Inquiry. Paper presented at the Annual Conference of the American Political Science Association.
- Fuchs, D. (1999). The Consumer as a Driving Force in the Greening of Industry. The Question of Policy Instrument Choice. Paper presented at the Annual Conference of the International Studies Association.
- Fuchs, D. (2007). Business Power in Global Governance. Boulder: Lynne Rienner Publishers.
- Fuchs, D., and Arentsen, M.J.. (2002). "Green Electricity in the Market Place. The Policy Challenge." Energy Policy 30 (6): 525–38.
- Fuchs, D., and Lorek, S. (2005). Sustainable Consumption Governance A History of Promises and Failures. *Journal of Consumer Policy*, 28, 261-288.
- Fuchs, D., R. Meyer-Eppler, J. Sattelberger, and C. Moser. (2009). The Implications of Private Food Governance for the Sustainability and Democratic Legitimacy of the Global Agro-Food System. Münster: Westfälische Wilhelms-Universität. Sustainable Governance Discussion Paper, 01/2009.
- Galbraith, J. K. (1958). The affluent society: Houghton Mifflin.
- Garner, R. (2000). Environmental politics: Britain, Europe and the global environment. Macmillan.
- Graus, W., and Worrell, E. (2009). Trend in efficiency and capacity of fossil power generation in the EU. *Energy Policy*, *37*(6), 2147-2160.
- Greening, L. A., Greene, D. L., and Difiglio, C. (2000). Energy efficiency and consumption—the rebound effect—a survey. *Energy Policy*, 28(6-7), 389-401.
- Group of 20. (2009). Leaders Statement The Global Plan for Recovery and Reform. *G20, Leaders Statement, London, 02.04.2009*
- Hall, C. M. (2009). Degrowing tourism: Décroissance, sustainable consumption and steady-state tourism. *Anatolia: An International Journal of Tourism and Hospitality Research*, 20(1), 46-61.
- Hamilton, C. (2009). Consumerism, self-creation and prospects for a new ecological consciousness. *Journal of Cleaner Production, Early view online, 16.11.2009.*
- Hanley, N., McGregor, P. G., Swales, J. K., and Turner, K. (2008). Do increases in energy efficiency improve environmental quality and sustainability? *Ecological Economics*, *68*, 692-709.
- Hartmann, K. (2009). Ende der Märchenstunde Wie die Industrie die Lohas und die Lifestyle-Ökos vereinnahmt. Blessing, Munich.
- Hewson, M., and T. Sinclair (eds.). (1999). Approaches To Global Governance Theory. Albany: SUNY Press.
- Hinterberger, F., Hutterer, H., Omann, I., and Freytag, E. (2009). Welches Wachstum ist nachhaltig?: Mandelbaum.
- Hofstetter, P., and Madjar, M. (2003). Linking Change in Happiness, Time-use, Sustainable Consumption, and Environmental Impacts: An Attempt to Understand Time-rebound Effects. Zürich: Society for Non-Traditional Technology, Japan/BAO and Consultrix.
- Hunter, J. R. (1997). Simple Things Won't Save the Earth University of Texas Press, Austin.
- International Journal of Consumer Studies. (2009). Special Issue on Sustainable Consumption. 33(2).
- International Journal of Innovation and Sustainable Development. (2007). Special issue: Sustainable consumption and innovation. *2*(2)
- International Journal of Sustainable Development. (2001). Special Issue on Sustainable Consumption. *4*(1).
- Jackson, T. (2006). The Earthscan Reader on Sustainable Consumption: Earthscan.
- Jackson, T. (2009). Prosperity Without Growth. UK Sustainable Development Commission
- Jalas, M. (2002). A time use perspective on the materials intensity of consumption. *Ecological Economics*, *41*(1), 109-123.
- Journal of Cleaner Production. (2007). Sustainable Production and Consumption: Making the Connection. 15(6).
- Journal of Industrial Ecology. (2005). Sustainable consumption: special issue
- Kallis, G., Schneider, F., and Martinez-Alier, J., (Guest Eds.). (2010). Special Issue: Growth, Recession, or Degrowth for Sustainability and Equity? *Journal of Cleaner Production*, 18 (6).
- Latouche, S. (2007). Sustainable consumption in a 'de-growth'perspective. In E. Zaccai (Ed.), Sustainable Consumption, Ecology and Fair Trade (pp. 178–185). London: Routledge.

- Latouche, S. (2010). Growing a Degrowth Movement. In W. Institute (Ed.), *State of the world 2010: Transforming Cultures From Consumerism to Sustainability* (pp. 181). New York: WW Norton & Company.
- Layard, R. (2005). Happiness: Lessons From a New Science. New York: Penguin Press.
- Lietaert, M. (2010). Cohousing's relevance to degrowth theories. *Journal of Cleaner Production*, *18*(6), 576-580.
- Lorek, S. (1993). *Das Konzept der Nachhaltigen Entwicklung*. Unpublished Diplomarbeit, Fernuniversität, Hagen.
- Lorek, S. (1996). Entwicklungsprojekte für den Norden? *Bundesforum Zeitschrift der Katholischen Landjugendbewegung*, 7/1996.
- Lorek, S. (2005). *Linking praxis to policy making and policy back to praxis*. Paper presented at the Sustainable Production and Consumption: Policies, Action and Communication.
- Lorek, S. (2010). *Towards Strong Sustainable Consumption Governance*. Saarbrücken: LAP Publishing.
- Lorek, S., Giljum, S., and Bruckner, M. (2008). Sustainable Consumption Policies Effectiveness Evaluation (SCOPE2) Inventory and Assessment of Policy Instruments (final draft). Overath, Vienna: Sustainable Europe Research Institute SERI.
- Lorek, S., and Lucas, R. (2003). *Towards Sustainable Market Strategies A Case Study on Ecotextiles and Green Power* (No. 130). Wuppertal: Wuppertal Institute.
- Löwe, C. (2009). *Guiding the path.* Paper presented at the Finding the new path: a more strategic role for sustainable consumption and production
- Maniates, M. (2002). In search of consumptive resistance: the voluntary simplicty movement. In T. Princen, M. Maniates and K. Conca (Eds.), *Confronting consumption* (pp. 199-235). Cambridge: The MIT Press.
- Maniates, M. (2009). Cultivating Consumer Restraint in an Ecologically Full World: The Case of "Take Back Your Time". In L. Lebel, S. Lorek and R. Daniel (Eds.), *Sustainable Production and Consumption Systems*. Dordrecht: Springer.
- Maniates, M. (2009). Editing Out Unsustainable Behavior. In Erik Assadourian et. al. (Ed.), *State of the World 2010: Transforming Cultures, From Consumerism to Sustainability:* W.W. Norton and Company, New York.
- Maniates, M. (2010). Cultivating Consumer Restraint in an Ecologically Full World: The Case of "Take Back Your Time". In L. Lebel, S. Lorek and R. Daniel (Eds.), *Sustainable Production and Consumption Systems*: Springer, Dordrecht: forthcoming.
- Manzini, E., and Jégou, F. (2003). Sustainable everyday: scenarios of urban life: Ambiente.
- Marks, N., Simms, A., Thompson, S., and Abdallah, S. (2006). The (Un) happy Planet Index. *London:* New Economics Foundation. Downloadable from www. neweconomics. org and www. happyplanetindex. org.
- Matthey, A. (2010). Less is more: The influence of aspirations and priming on well-being. *Journal of Cleaner Production*, 18(6), 567-570.
- Mont, O., and Bleischwitz, R. (2007). Sustainable consumption and resource management in the light of life cycle thinking. *European Environment*, 17(1), 59-76.
- New Economics Foundation. (2009). *National Accounts of Well-being: bringing real wealth onto the balance sheet.* London.
- Noorman, K. J., and Uiterkamp, T. S. (1998). *Green Households?: Domestic Consumers, the Environment and Sustainability*: Earthscan.
- Norwegian Ministry for the Environment. (1994). Symposium on Sustainable Consumption. Oslo, Norway.
- OECD. (2009). Household behaviour and environmental policy.
- OECD. (2010). Outline for the Green Growth Strategy's Synthesis Report. Paris.
- Princen, T. (2005). The logic of sufficiency: The MIT Press.
- Princen, T., Maniates, M., and Conca, K. (Eds.). (2002). *Confronting consumption*. Cambridge: MIT Press.
- Rauschmayer, F., Omann, I., Frühmann, J., and Bohunovsky, L. (2008). What about needs? Reconceptualising Sustainable Development. SERI Working Papers 8, Vienna.
- Rehfeld, K. M., Rennings, K., and Ziegler, A. (2007). Integrated product policy and environmental product innovations: an empirical analysis. *Ecological Economics*, *61*(1), 91-100.
- Reusswig, F. (2010). Lifestyle Dynamics as a Means of the Sustainability Transition. In L. Lebel, S. Lorek and R. Daniel (Eds.), *Sustainable Production and Consumption Systems*: Springer, Dordrecht: forthcoming.

- Ricci, A. (2008). *New socio-economic concepts, paradigm shift and territorial dynamics in a long term perspective*. Paper presented at the SSH Infoday,.
- Røpke, I. (2009). Theories of practice—New inspiration for ecological economic studies on consumption. *Ecological Economics*, 68, 2490-2497.
- Røpke, I., and Reisch, L. (2004). *The Ecological Economics of Consumption*. Cheltenham: Edward Elgar
- Rubik, F., and Scholl, G. (2002). Integrated Product Policy (IPP) in Europe—a development model and some impressions. *Journal of Cleaner Production*, *10*(5), 507-515.
- Sachs, W., Loske, R., and Linz, M. (1998). *Greening the north: A post-industrial blueprint for ecology and equity*: Zed Books.
- Scheer, D., and Rubik, F. (2006). Governance of integrated product policy: in search of sustainable production and consumption: Greenleaf Publishing.
- Schor, J. B. (1998). *The Overspent American: Upscaling, Downshifting, and the New Consumer.* New York: Basic Books.
- Schultz, I., Empacher, C., Hayn, D., and Hummel, D. (2001). *Projekt: Gender Impact Assessment des Programms' Umwelt und nachhaltige Entwicklung'der EU.* Frankfurt: Institut für sozial-ökologische Forschung ISOE.
- Scitovsky, T. (1992). The joyless economy: The psychology of human satisfaction: Oxford University Press, USA.
- SCORE Network. (2008). Sustainable Consumption and Production: A Framework for Action. Brussels.
- Sen, A. K. (1999). Development as freedom: Oxford University Press.
- Seyfang, G. (2004). Working outside the box: Community currencies, time banks and social inclusion. *Journal of Social Policy*, 33(01), 49-71.
- Seyfang, G. (2007). Growing sustainable consumption communities: the case of local organic food networks. *International Journal of Sociology and Social Policy*, 27(3), 120-134.
- Seyfang, G. (2009). The New Economics of Sustainable Consumption: Palgrave Macmillan, New York.
- Spangenberg, J. (2010a). The growth discourse, growth policy and sustainable development: two thought experiments. *Journal of Cleaner Production, Early view online, 17.11.2009.*
- Spangenberg, J. H. (2010b). The growth discourse, growth policy and sustainable development: two thought experiments. *Journal of Cleaner Production*, *18*(6), 561-566.
- Spangenberg, J. H., and Lorek, S. (2002). Lebensstandardmessungen einschließlich nicht-marktlicher Dienstleistungen. In G. Bosch, Hennicke, P., Hilbert, J., Kristof, K., Scherhorn, G. (Ed.), *Die Zukunft von Dienstleistungen* (pp. 455-481). Frankfurt: Campus.
- Spangenberg, J. H., and Lorek, S. (2003). Lebensqualität, Konsum und Umwelt: intelligente Lösungen statt unnötiger Gegensätze. Bonn: Friedrich-Ebert-Stiftung.
- Stiglitz, J., Sen, A., and Fitoussi, J.-P. (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress. Paris.
- Tukker, A. (Ed.). (2008). System Innovation for Sustainability 1. Sheffield: Greenleaf.
- Tunçer, B., Ragazzi, P., and Narberhaus, M. (2009). *Better and New NGO Strategies to Tackle the Sustainable Consumption and Production Challenge?* Wuppertal, London: 'Action Town' Discussion Paper; EU FP7 Research Project.
- UN Commission on Sustainable Development. (1995). *International Work Programme on Sustainable Consumption and Production Patterns* United Nations, New York.
- UNEP. (2001). Consumption opportunities. Strategies for change. A report for decisionmakers. Paris: United Nations Environmental Programme.
- UNEP. (2009). Guidelines for Social Life Cycle Assessment of Products. Paris.
- United Nations. (1992). Agenda 21; Results of the World Conference on Environment and Development. New York.: United Nations.
- van Griethuysen, P. (2010). Why are we growth-addicted? The hard way towards degrowth in the involutionary western development path. *Journal of Cleaner Production*, *18*(6), 590-595.
- Watson, D., Hansen, M. S., Lorenz, U., Szlezak, J., Mortensen, L., and Stanners, D. (2010). *A FRAMEWORK FOR INDICATOR-BASED REPORTING ON SUSTAINABLE CONSUMPTION AND PRODUCTION*. Paper presented at the European Roundtable on Sustainable Consumtion and Production
- Westra, L., and Werhane, P. H. (1998). *The business of consumption: Environmental ethics and the global economy*: Rowman and Littlefield Publishers.
- WWF-UK. (2008). Weathercocks & Signposts The environment movement at a crossroads. Surrey, UK: WWF.

WWF-UK. (2009). Simple and painless? The limitations of spillover in environmental campaigning. Surrey, UK: WWF.
Zaccai, E. (2007). Sustainable Consumption, Ecology and Fair Trade London: Routledge.