

The Sustainable Consumption Institute Research Programme

Transitions to Sustainable Societies

Over the last several hundred years, and in particularly dramatic fashion since the 1950s, economic growth and an exponential increase in the volume of goods and services consumed in the developed world has led to a massive increase in the exploitation of finite resources: fossil fuels, other minerals, forests, fresh water, marine life etc. This has in turn created huge sustainability challenges, including climate change, pollution, deforestation, biodiversity loss, water depletion, and growing food insecurity.

On current trends, these challenges will become even more devastating. According to the UN global population will increase from 7 billion today to between 8 and 11 billion by 2050. Population growth combined with rapid economic development in the BRIC countries and beyond, means that rising consumption and growing resource use will bring various sustainability challenges to a critical level.

Recognition of these challenges has led to a focus – in policy-making, academia, civil society and business strategy – on how to achieve the transition to a sustainable society: one in which resources are exploited much more efficiently and sparingly so that the aggregate stock of resources, including natural resources, is not diminished between generations.

The role of consumption – both as a cause behind the exploitation of resources and as a potential remedy – has long been recognised. As early as 1987, in encouraging sustainable development, the Brundtland Commission advocated “consumption standards that are within the bounds of the ecological possible and to which all can reasonably aspire”. The UN Sustainable Development Summit in 2002 underlined the importance of a consumption perspective when it referred to “sustainable consumption and production” (SCP). It focused on needs such as food, housing and mobility, and ways to fulfill these needs more sustainably. In Britain, the Confederation of British Industry (CBI) underlined in 2007 that, through their own actions and purchasing decisions, consumers in developed countries are responsible for two-thirds or more of total greenhouse gas emissions.

However, many policy and related sustainability initiatives since Brundtland have been limited in three ways:

- a) **A focus on “production”.** Despite the references to consumption, action on sustainability – particularly in relation to climate change – has tended to be approached predominantly from a “production” perspective. For example, policy action at national and international level has often focused on measures to decarbonise the energy supply, in particular by encouraging investment in renewable energy or related technologies. Almost all business strategies on climate change have begun by focusing

on their direct emissions and the steps they will take to reduce or decarbonise these emissions. Businesses have more latterly moved onto considering consumer emissions, but generally with less vigour than they have applied to their own operations.

- b) **An emphasis on “less consumption”.** The Brundtland Commission expressed the view as long ago as 1987 that sustainable development “can be consistent with economic growth provided the content of growth reflects the broad principles of sustainability and non-exploitation of others”. However, the growing focus of the role of consumption in exacerbating sustainability pressures has in some cases led to a belief that the solution lies primarily in curbing consumption, at least in advanced economies. The case is sometimes made on grounds of equity: people in developing countries consume considerably less than people in advanced economies and there is a moral argument that their consumption should be allowed to grow somewhat to reduce this inequality. However sustainability constraints mean that it will not be possible to also allow that catch-up while also allowing consumption in advanced economies to continue to grow. A different argument is that, given the ultimate goal of policy should be to increase human well-being, increased consumption of material goods beyond certain thresholds does not raise well-being. From this perspective, “prosperity without growth” should be the aim, to be achieved by abandoning economic growth (narrowly defined as growth of GNP) and material consumption and replacing them with “higher value” contributors to well-being.
- c) **A narrow pursuit of “behaviour change”.** Eschewing a “de-growth” approach, some policy-makers and businesses have in recent years introduced measures to encourage consumers to adopt more sustainable behaviours, e.g. reducing energy use, recycling, or buying local or low-carbon products. These initiatives have had mixed success. Even where they have met their objectives (e.g. selling more energy-saving light bulbs or increasing rates of recycling), their overall impact has been small and often short-lived. This is arguably because the challenge has been approached too narrowly: seeking to effect a single, discretionary change without understanding the inhibitors to change and the multiplicity of factors that need to be understood and aligned if effective and lasting change is to be secured.

The SCI seeks to avoid each of these pitfalls. Tackling environmental sustainability involves changing patterns of consumption (including use of leisure time), from commodities and activities which are highly polluting to those which are less environmentally damaging, rather than a blanket reduction in all forms of consumption. Moreover, even if it were desirable, it recognizes that significant reductions in absolute volumes of material consumption are unlikely to be achieved at the scale and speed required without radical political and economic upheaval. Nor are they likely to be sustained. Consumption has been shown to be a fundamental aspect of all modern societies. It is, for example, a means through which people seek pleasure and satisfaction, what we consume

and the way in which we do it is often critical to our sense of identity and our relationships. In past and present, consumption has been a source of civic action and citizenship as well as satisfying individual desires. Finally, much consumption is necessary for satisfactory accomplishment of the daily practices through which our lives are organized.

The SCI therefore does not support the view that sustainable consumption can be delivered only through “de-growth”. Clearly, some sustainability challenges are so great and so immediate that success in tackling them can only be achieved by reducing consumption of specific commodities (e.g. endangered fish stocks). In addition, there is a broad consensus that the challenge of climate change is so severe and urgent that action is required now as well as in the longer term. To the extent that emissions reductions cannot be achieved quickly by technological fixes, there is arguably a role for regulation, “choice-editing” or other ways of curbing emissions by curbing consumption of carbon-intensive commodities or activities.

Therefore, strategies are needed which recognise that it is the resource-intensity of consumption, not consumption per se, that gives rise to the challenge of sustainability. A successful approach must focus on reducing the resource intensity of consumption: not just through industrial and product innovation, but through an understanding of the level and scale of change required, the timescales in which they must be achieved, and the habits, practices and motivations of people as consumers. It is arguably the latter who – through their actions – will determine whether strategies to achieve sustainable consumption succeed or fail.

The Challenge of Sustainable Consumption

The SCI approaches the challenge from a consumption perspective. However, any attempt to do so needs to begin by recognising the challenges that any such approach must face:

- **Scale.** The major sustainability challenges – e.g. climate change, deforestation, food security – are global in scale that require transformation or transition on an unprecedented scale. This does not render small-scale action irrelevant, but requires those who seek measurable and effective change to understand and address the size of change required.
- **Multiple actors and interventions.** To achieve effective and lasting change on most sustainability challenges, action needs to be taken by a multiplicity of actors. For example, achieving a major decarbonisation of private transport requires a combination of technological innovations such as electric/hydrogen cars, installation of accessible charging points, pricing alignment and/or incentives and consumer confidence in those technologies

- **Challenging time frames.** The major sustainability challenges require a combination of urgent action immediately and transitions that need to be understood, planned, delivered and sustained over long periods, e.g. 50 years or more.
- **Significant Uncertainties.** There is significant uncertainty about some of the scientific aspects of issues such as climate change, and about the means of moving to a sustainable economy or sustainable consumption. This creates uncertainty at several levels – for consumers as well as for policy-makers and business. Faced with uncertainty, each may tend towards delay or hedging, making small-scale changes rather than strong commitments for fear of betting on the wrong horse. The challenge is how to build scale and momentum in solutions while preserving flexibility to adapt strategies as better information becomes available.
- **Inertia.** Compounding the lack of consensus on solutions is the challenge of inertia among consumers, policy-makers, businesses and civil society more generally. Consumers are often attached to existing ways of doing things. They have developed habits, routines, capabilities and preferences that are difficult to change. Businesses tend to be locked in to operating procedures, and constrained by existing technical capabilities and outlook. They may be reluctant to move in radical directions, which may disrupt and cannibalise sunk investments in plant, property, supply chains and skills. Existing competencies, responsibilities, and policy thinking can lock in policy-makers. Inertia may be compounded by self-interest or lack of political power or mandate. Overcoming inertia is therefore a major challenge.

The SCI Approach to Sustainable Consumption

Informed by the above challenges, the SCI approach to sustainable consumption has the following key characteristics:

- a) **A distinctive focus on consumption.** Consumers are not just purchasers of green products or the end of a production supply chain. They are enactors of ways of life, in which sustainability is usually only one consideration among many. Placing consumption in the foreground of research allows us to focus on understanding human needs, values, practices and habits so as to inform and strengthen action to achieve a transition to sustainable consumption. As noted above, people derive pleasures and satisfactions from consumption and consumption is important to our senses of identity and personal relationships. The analytical challenge is to understand these ongoing dynamics and find the most effective points of intervention. A deeper understanding of consumer practices will help to shape business and government strategy.
- b) **Linking consumption to production** Placing consumption in the foreground must not mean neglecting questions about production, supply

and distribution of goods and services – each of which helps to shape how people go about their daily lives and are in turn shaped by consumption. The challenge is not simply to understand and seek to alter consumer behaviour, but to understand how consumers use products and services. In particular it raises the question of how new more sustainable product and service innovations disrupt and are absorbed into everyday practices – and how understanding this process can in turn shape innovation.

- c) **Systems thinking.** The radical and broad nature of the transformation and transitions required mean that systems innovation and disruption forms one important part of our approach. Addressing the sustainability challenge requires a focus on consumer behaviour and practice, technology, markets, industries, infrastructure, policy and regulation.
- d) **Multiple levels of analysis.** Transitions to sustainable societies can be analysed at multiple scales: micro, meso and macro. Critical here is to further understand how multiple levels interact and generate processes of social and economic change. This involves analysis of the relationships between, for example, an individual person's habits, how households are provisioned, the relations between social groups (in terms of lifestyle, age, class), and broader political economies.
- e) **Comparative and historical approaches.** Recognising the global nature of some environmental issues, the SCI explores sustainable consumption through comparative analysis of: countries with different social and political structures; cultural variations across social groups; and past and present societies. Such analyses are particularly important for revealing processes of change and provide instructive insights into trajectories of (sustainable and unsustainable) consumption.

The SCI's Research Areas

The SCI is a multi-disciplinary research institute with expertise in business studies, economics, geography, history, innovation studies, sociology, political science and psychology. Our remit is to advance fundamental understandings of different aspects of consumption and how consumption is provisioned in order to encourage transitions to sustainable societies. This will require that our research informs more practically oriented engagement with stakeholders. In order to achieve these aims, our work is broadly oriented around four core areas of research.

I. Provisioning, consumption and organization of daily life

Making consumption more sustainable will require changes in both *what* goods and services people use in their daily lives and *how* they use them. This, in turn, requires analysis of *why* people consume in particular ways. Put in different terms, to understand consumer behaviour necessitates analysis of: 1. Acquisition

– how goods and services are acquired; 2. Appreciation – the symbolic, communicative and aesthetic aspects of consuming; 3. Appropriation – the use of goods and services in order to accomplish personal and social practices and standards of living.

Our focus is on how these three A's come together in daily life, since it is everyday practices such as eating, bathing and driving that make up the bulk of energy, water and the other resources we consume. What is distinctive about our approach to consumer behavior is that we look beyond individual choice toward ordinary and habitual everyday practices and how they relate to changing infrastructures, policy and power. Our research seeks to understand why lifestyles have developed in their particular form and to explain their relative resilience or flexibility in order to assess the potential for sustainable interventions.

II. System innovation for sustainability transitions

Consumption is, self-evidently, intimately related to production – especially in terms of the supply of goods and services and how new goods and services can transform everyday lives. Technological and social innovations, both incremental and radical in form, will be crucial to achieve sustainability transitions. While short-term incremental innovations (e.g. more efficient cars or car sharing practices) have a part to play, the scale of the challenge requires major system transitions (and disruptions) over longer 30-50 year time horizons. System innovations will require new technologies, markets, and consumer practices, not to mention accompanying new business models, regulations, and infrastructures. Such innovations involve high levels of risk and uncertainty, but also offer the greatest promise for sustainability transitions.

Our focus is on the processes, scales and speeds through which technological and social innovations spread, with an explicit focus on understanding and advancing the prospects for accelerating innovation for sustainability. Such acceleration will need to avert and overcome forms of system lock-in, making a critical question for this theme to identify the necessary mechanisms and conditions for shifting innovation systems in directions that will render consumption sustainable.

III The cultural politics of sustainability

The manner in which sustainability problems are understood plays an important role in shaping efforts to stimulate progress towards more sustainable societies. Diverse classes of actors compete to promote alternative problem framings and potential solutions. Professional trade associations, communications agencies, CSR and marketing departments of firms, political parties, social movements and others engage in a range of activities contributing to the production of sustainability narratives.

Our focus is on how cultural understandings are produced and on the effects that they have on the patterns of everyday practices and innovation processes. We

are interested in: the detail of specific discourses around, for example waste; accounting for the ebb and flow of interest in specific issues such as climate change; and in how longer standing cultural institutions (neoliberalism, egalitarianism, deep ecology) are reproduced through the shaping of sustainability problem and solution framings.

IV Reframing policy and practice

The SCI team has a distinctive range of methodological capabilities, both quantitative and qualitative, including time diary analysis, large databases, surveys, ethnography, key informant and household interviews, documentary and archival research and media analysis. Our aim is to use these approaches to generate data for the development of new concepts and theories to better understand the dynamics of everyday practices, cultural discourse and innovation systems. Our focus is also on the provision of evidence and understanding for policy makers in government, business and third sector. This thematic orientation of our research agenda emphasizes our strong belief in the value of social scientific methods to provide alternative bodies of data to complement conventional forms of evidence currently used in policy-making.

This programme of research is being developed through a series of theoretically informed empirical research projects (see appendix for the current portfolio of research projects) and knowledge exchange activities with our key stakeholders. By progressing this agenda, the SCI will make a fundamental contribution to advancing knowledge to inform transitions to sustainable societies.

Appendix: Projects

To develop the core themes outlined above, the SCI has an evolving portfolio of specific research projects, including a range of studies funded through external sources.

1. Eating practices, routines and rhythms: this project employs time-diary based survey methods to examine the organization of household eating practices. We explore the timings, durations and frequencies of eating events, and the ways in which those events are provisioned, to examine the potential for coordinating food consumption activities in more sustainable ways.

SCI researchers: Alan Warde, David Evans, Luke Yates, Dale Southerton, Jennifer Whillans.

2. Eco-innovation and consumer behavior: This project analyses the relationship between innovation and consumption by focusing on a set of product categories, where eco-innovations have already been introduced or where there are plans to do so, and will explore the consumer uptake (or lack) of those products. Its focus is on domestic lighting and laundry practices. The research employs a range of

innovative methodologies including: transactions data analysis, time-diary informed online surveys, key informant interviews, household interviews, and documentary analysis.

SCI researchers: Dale Southerton, Andrew McMeekin, Josephine Mylan, David Evans, Luke Yates, Jennifer Whillans and Luca Panzone.

3. Householders, Retailers and Food Waste Transitions: This research and knowledge exchange project will explore the ways in which the challenge of food waste reduction is currently being framed, interpreted and responded to by a number of different stakeholders. Particular attention will be paid to the processes through which food waste has been positioned as an issue that households and retailers must take responsibility for. In order to do so, a number of key informant interviews will be carried out, and these will be contextualised with a qualitative content analysis of secondary sources. Concomitantly, it will draw upon and integrate existing quantitative datasets to develop social scientific accounts of household food waste. Additionally, through a series of multi-stakeholder workshops and exhibitions this project will share data, develop state of the art thinking about food waste and identify innovative practical mechanisms for its reduction.

SCI researchers: David Evans, Dan Welch, Dale Southerton

4. Changing Eating habits: an International Comparison: This project examines changing dietary habits using qualitative comparative analysis between France, England and Scotland. It examines dietary change in relation to those who purposively seek to lose weight, anglo-french couples negotiating culinary cultures, immigrant groups, and local initiatives to change the provisioning of food. ESRC funded

SCI researchers: Alan Warde and Daniel Welch.

5. Patterns of Water: Understanding Diversity and Change in Domestic Consumption: This project seeks to apply survey and other mixed methodologies to the study of water using practices in the home. Funded by the EPSRC, ESRC, Scottish Government and DEFRA it consisted of five main activities

1. 1800 person survey on household water using practices in the south of England;
2. Qualitative interviews with people who had taken part in the survey.
3. Focus groups on 'dirt, bodies, clothes and cleanliness' (research results to follow soon).
4. Micro-econometric modelling of consumption lead by project partner Dr Ben Anderson.

SCI Researcher: Alison Browne

6. Integrating and developing 'practice' approaches to understandings sustainable consumption: This project interrogates the findings from the Sustainable Practices Research Group programme to develop the applications and impact of ideas and insights generated from a 'practice' focused approach to understanding sustainable consumption and to theoretically interrogate these ideas in relation to other perspectives. ESRC funded

SCI researchers: Andrew McMeekin and Dale Southerton.

7. Governance of the discontinuation of socio-technical systems: This project investigates how policymakers manage (or not) the decline of existing systems, in the context of relations to other actors (e.g. firms, social movements, wider publics). The project builds on ideas from innovation studies, political science, and discourse theory. The 3-year project, which is funded by the Open Research Area in Europe, will investigate four cases in four countries (UK, France, Netherlands, Germany): nuclear power, DDT, internal combustion engine cars, incandescent light bulbs.

SCI researcher: Frank Geels

8. Sustainability related product labelling in China: This project examines the institutionalisation of Chinese product labelling schemes across different fields, drawing conclusions for the planned implementation of a Chinese carbon labelling scheme. Amongst others, the research focusses on organic certification in the dairy sector, also looking at transformations in the dairy supply chain and their environmental as well as food safety implications. Comparisons are made with recent developments in the UK. The research is co-funded by the SCI and the Tyndall Centre for Climate Change Research at Fudan University, China.

SCI researcher: Leonie Dendler

9. The DROP project (Benefit of Governance in DROught AdaPtation): This project explores the preparedness of regions in the north west of Europe to droughts and water scarcity. It involves assessing the regional institutional context for supporting the adaptation to drought and water scarcity in regions, and working closely with a range of stakeholders to make suggestions about how the governance of this process could be improved across NW European regions. This practice and policy focused project is funded by the INTERREG IV-B NEW (via EDF).

SCI Researcher: Alison Browne

10. Research Centre on Innovation and Energy Demand: This 5-year research centre, funded by ESRC/EPSRC, aims to develop an interdisciplinary understanding of the emergence, diffusion and impact of low-energy innovations – new technologies, organisational arrangements or modes of behaviour that are expected to improve energy efficiency and/or reduce energy demand. The centre uses the multi-level perspective as conceptual background, but also mobilizes insights from economics, human geography, and consumption studies. Research addresses low-energy innovations in various empirical domains: transport, housing, energy.

SCI researcher: Frank Geels.

11. Adapting infrastructure for a lower carbon society – historical project: This project investigates the co-evolution of energy infrastructures and domestic energy use in twentieth century England. It looks at how three councils interacted with energy supply and suppliers, in particular how they introduced energy infrastructures in their council housing, how these infrastructures changed over time and how they shaped domestic practices and vice versa. The project is part of the Dynamics of Energy, Mobility and Demand (DEMAND) Centre, <http://www.demand.ac.uk/>.

SCI Researchers: Anna Carlsson-Hyslop and Frank Trentmann

12. Energy Consumption in Britain and Japan over the Twentieth Century:

The project investigates the historical changes in energy consumption in Japan and the UK. The aims of this largely qualitative research project are to shed light on the roles and practices of users and consumers of energy, and on the materiality of energy in the history of energy consumption. This comparative historical project covers topics such as consumer response to energy transitions, shortages and disruptions.

SCI Researchers: Hiroki Shin and Frank Trentmann

13. Lead firms and the governance of supply chain eco-innovation: This project studies the role that lead firms (retailers and branded manufacturers) play in the coordination and governance of eco-innovation processes within their supply chains. It does so by combining theoretical insights from the literatures on innovation systems and global value chain governance.

SCI researchers: Andrew McMeekin, Sally Gee, Frank Geels and Jo Mylan

14. Public procurement of sustainable innovations: this work looks at the role of a local authority (in Manchester) in procuring and coordinating a system innovation in waste management infrastructure. It has also engaged with a UK Cabinet minister and senior civil servants to consider wider opportunities for 'closing the procurement gap' between those policies focusing on innovation and those on sustainable sourcing.

SCI researchers: Sally Gee and Andrew McMeekin

15. Governance of Responsible Research & Innovation: This work examines 'what is responsible' R&I in a particular geographic or socio-technological area, how contestation is aligned, and how governance arrangements emerge to steer innovative activity towards responsible outcomes. Issues of legitimacy and effectiveness are explored. Initial research is looking at the case of biofuels in the USA and Brazil. EC FP7 funded.

SCI researchers: Sally Gee

16. 'Environmental Leapfrogging': Water Use in Developing and Emerging Markets: This project will explore the connection between a key business question – how can Unilever reduce the water footprint of their customers in developing and emerging markets – and a range of research questions about the ways that this transition to more sustainable consumptive laundry and bathroom practices can be facilitated. It will explore a wide range of complex issues that influence sustainable consumption including the impacts of rising middle classes, the relationship between development indicators and sustainable consumption, and the role of infrastructures and governance processes in encouraging sustainable consumption. Unilever funded.

SCI Researchers: Alison Browne and David Evans

17. Moral licensing:

Moral licensing refers to behavioural patterns identified by psychology experiments where individuals who complete a 'good act' – say buying a green product, then feel licensed to conduct a 'bad act' - say buying non-green

products. Such behavior could pose a significant problem for policy-makers in business or government seeking to change consumption behavior. However moral licensing also challenges other findings in both psychology and economics which suggests that individuals act in a consistent fashion. Theoretical research we have conducted suggests it may be possible to reconcile these two approaches and we will conduct a number of empirical projects to test the theoretical predictions. Unilever funded

SCI researchers: Luca Panzone and Alistair Ulph

18. Exploring transition pathways to sustainable, low carbon societies: This project investigates sustainability transition pathways in five empirical domains (heat, electricity, mobility, agro-food, and forestry). The methodological novelty is to analyse these transitions pathways from three different angles: 1) integrated assessment modeling, 2) socio-technical transition studies (multi-level perspective), and 3) participative action research at the local and urban level (of 'transition in the making'). Funded by the European Commission (FP-7).

SCI researchers: Frank Geels and Andrew McMeekin.

19. Consumption, Environmental Change and Everyday Life: The Political Economy of Future Households. This project explores competing visions of future societies from the perspective of policy-makers, social movement organisations and academics. Taking the household and concerns about reducing household size as its analytical focus, it seeks to understand how dynamics of governance, real and proposed, intersect with, and are imposed on, the logic of daily life. Funded by Hallsworth Fellowship.

SCI researcher: Luke Yates