Introduction

**Shane Fudge, Michael Peters, Steven M. Hoffman
and Walter Wehrmeyer**

While a strengthened focus on the regulation of consumerism has been apparent at least since the 1987 Brundtland Report (Brundtland, 1987) the struggle to engage a uniform policy response around sustainability has been noticeable, not only at the level of the individual, but also at the systemic level of local, national, regional and international politics. The variable success of policies that have attempted to isolate and target agency as levers for change and transition suggests that behaviour-based policies must also be recognized as constituting part of the move towards wider, systemic change. As Fudge and Peters (2011) have argued, the scale and complexity of sustainability suggests that ‘transition pathways’ will only realistically come about as the result of a more negotiated shift that is played out through collaboration between governments, businesses, communities and individuals.

The result of this change in attitude has been an evolving focus on modifying individual and group behaviour as a more integral element in the design of policy strategies. In order to achieve meaningful reductions in energy-related carbon dioxide (CO₂) emissions, for instance, policy makers have begun to embrace a demand management approach, whereby lifestyle trends and patterns of individual and cultural consumption have been incorporated into more ‘bottom-up’ policy approaches. In many cases, this approach has been occasioned by the inability of conventional, mainly supply-side, energy strategies to achieve the sorts of long-term and enduring behavioural change required on the part of either households or firms. For instance, current estimates suggest that approximately 40 per cent of carbon emissions are embedded in household energy use and transport and mobility practices, both of which are often marginally affected by the sort of centralized policies and practices that have traditionally characterized energy planning. As Peters et al. (2012) have argued, such ‘top-down’ solutions will be effective, at best, only to the degree that they are able to engage with ‘place-based’ practices and behavioural norms, including those around food, energy, waste and other consumption habits and practices.

This book is premised on the belief that fresh ideas, new insights and interesting perspectives relevant to behaviour change within the context of the sustainability debate continue to be of paramount importance. Consider, for instance, the issue of climate change. Historically, emission-reducing policies have focused on regulating large and readily identifiable contributors to greenhouse gas levels such as power plants and other so-called point sources. While a number of countries have forced significant reductions, at least on a plant-by-plant basis, the limits of this approach are quickly being realized. As a result, effective future-oriented climate policy must be based on an all-together different approach, namely, one that focuses on the myriad ways in which individuals – as a category in their own right – put strains on the ‘natural world’ through long-practised consumption behaviours.

Changing behaviour is, of course, no simple task; the conflicts and divergent politics that exist around climate change again illustrate the difficulties in brokering national, much less international, agreement on how to design and implement a behaviour-based policy approach. Indeed, there often exists significant disagreement about whether behavioural change is necessary or even desirable. China, for instance, has made the argument that its citizens have less of a responsibility to act on climate change than American citizens, where the average consumer emits many times the carbon on a per capita basis than her Chinese counterpart. In Sweden, on the other hand, large numbers of citizens themselves are influencing political action on environmental matters, while the UK government is only now beginning to realize that it will not reach stringent targets on greenhouse gas emissions without the willing engagement of its citizens.

Building upon a wide range of international contributions from academics, practitioners and experts in the area of behaviour change and sustainability, this book contributes to a theoretical understanding of both concepts. At the same time, the book provides numerous examples of past and current behaviour-based initiatives from around the world, many of which have been developed within diverse economic, cultural, social and political settings. In combining the theoretical with the practical, the book provides both academics and practitioners with a better understanding of what is and is not likely to resonate with individuals as they go about the uncertain business of choosing among energy options and behavioural alternatives.

ORGANIZATION OF THE BOOK

There is little doubt that the act of connecting with people, and the household/community configurations in which they find themselves,

requires recognition of the fact that all individuals are inherently different. Indeed, if decision makers at any level, from the local to the international, are to make progress it is imperative that they acknowledge the full gamut of influences that shape, manipulate, encourage and deter consumer conduct and choice with regard to home energy and carbon management (Whitmarch, 2008). Part I of the book therefore provides a series of theoretical and methodological understandings of behaviour change, examining in particular the ways in which consumption-based approaches to sustainable development have generated an intensified focus on the role of citizens (individually and collectively) in policy making. In Chapter 1, Abrahamse and de Groot set out a thorough overview of the many contributions that psychology can make to the important issue of encouraging pro-environmental behaviour change. The chapter considers a range of factors that are related to behavioural choices, such as attitudes, habits, norms and values, highlighting their importance in providing insights into the process of behaviour change. It is argued that behaviour change initiatives and environmental policies need to be grounded strongly in psychological theories in order to enhance their effectiveness.

Some of the shortcomings of both psychological and economic theories provide a focal point for Chapter 2, which reframes the issue of peak electricity demand using theories of social practices. Contending that the 'problem' is one of transforming technologically-mediated social practices, Strengers reflects on how this body of theory repositions and refocuses the roles and practices of professions charged with the responsibility for affecting and managing energy demand. The chapter outlines three areas where demand managers could refocus their attention: (1) enabling co-management relationships with consumers; (2) working beyond their siloed roles with a broader range of human and non-human actors; and (3) promoting new practice 'needs' and expectations. The importance of identifying and establishing a new group of change agents is highlighted; agents who are actively but often unwittingly involved in reconfiguring the elements of problematic peaky practices.

It is widely recognized that the concept of rational choice dominates modern mainstream economic treatment of consumer behaviour. In Chapter 3, Milne charts the historical development of how this came to be, examining the methodological transition away from an early deductivist approach focused on assumptions towards a more instrumentalist approach focused on prediction, which resulted in the marginalization of concerns about the 'realism' of assumptions. The chapter draws on a recent econometric study that pried apart the relative contribution of income, price and non-economic factors in influencing changes in UK household expenditure over a 45-year period. The implications of this

study are discussed in terms of the efficacy of economic interventions in influencing consumer behaviour, particularly in those categories of goods and services where non-economic factors are found to play the dominant role in explaining changes in expenditure.

A key area of consumer behaviour that has attracted increased attention for policy intervention in recent times – both in relation to health and environmental considerations – is that of food consumption. As Farsang and Reisch (Chapter 4) point out, considerable changes in food consumption, such as eating habits, dietary changes, availability and accessibility of food, have taken place over the last few decades. These are mainly due to an increase in productivity of the food sector, a greater diversity in product choices and a decrease in seasonal dependency due to global trade and storage and process technology. The food system is, however, a complex socio-ecological system surrounded by unpredictable events and uncertainties. The chapter explains how scenario planning is increasingly applied in both policy making and knowledge brokerage to deal with those uncertainties, complexities and long-term challenges as well as to influence developments proactively. The potential roles and applications of different types of scenarios such as visioning exercises, back-casting or quantitative models and their benefit for policy making are discussed. This is a field where ethical values feed into the consumption choices of consumers in a much more direct way than other areas, making this an interesting chapter to finish the first part of the book.

In Parts II and III, attention turns to the practical applications and political challenges that can surround attempts for promoting behaviour change at local, national and international levels. Part II focuses on different national interpretations at the European level and how behaviour change applications and interpretations relate to different cultural, political and economic influences.

Chapter 5 examines the new evidence or groundswells of promising sustainable lifestyle alternatives emerging across Europe. Hicks and Kuhndt describe a vision for more sustainable ways of living, review possible drivers of citizen action and propose a framework to analyse emerging trends towards more sustainable living. A number of promising practice examples are profiled according to the analytical framework. The authors argue that it will be important to continue to understand, test and evolve those concepts to ensure optimal positive impacts, and the consideration of possible unintended consequences or rebound effects.

Some of the key themes covered in Chapter 5 are then picked up by van de Lindt, Emmert and Luiten (Chapter 6) who report empirical findings from a three-year EU Framework Programme 7 study (BarEnergy) that explored the relevance and strength of barriers to energy changes

amongst end consumers and households in six European countries. The project aimed to identify trends and influences in household energy use within and across the UK, France, Hungary, Switzerland, Norway and the Netherlands. The chapter highlights the potential influence of different stakeholder groups as effective intervention points within the countries themselves and also within an emerging pan-European environment/energy policy framework.

The focus for Manzini (Chapter 7) is on collective endeavour at the local level and the exciting possibilities that surround grassroots innovation, social change and enabling strategies. The chapter considers emerging collaborative (sustainable) behaviours and the enabling strategies capable of supporting them towards the achievement of mainstream status, as opposed to their current status as predominantly active minorities. The chapter therefore highlights the potential of niche initiatives to both engage with and transform behavioural norms from effective points of influence.

The important role of local-level activity in promoting more sustainable forms of social organization and environmental practices links closely with the principles and theory of sustainable consumption. In Chapter 8, Brugidou and Garabuau-Moussaoui describe how in France the issue of public policies relating to changes in sustainable consumption has recently been raised, providing a point of focus during the '*Grenelle de l'Environnement*', a consultancy and decision-making system bringing together, for the first time, environmental non-governmental organizations (NGOs), companies, trade unions, members of parliament and government officials. The question of how behavioural changes have been driven by energy-saving policies in France is examined, together with an exploration of the many social logics either favouring or restricting energy-saving practices, both within 'concerned' social groups and among the general public.

Reducing the environmental impact of households and consumers forms a key focal point for Strandbakken and Stø (Chapter 9) where the current Norwegian context is examined. The authors consider the issue of decoupling environmental impact from economic growth in Norway by critically evaluating the importance of recent trends in domestic energy consumption, meat consumption and household waste. These trends are discussed in the context of decoupling with possible rebound effects considered. The debate is framed in the sociology of consumption and it is stipulated that any signs of a reduced environmental impact from Norwegian households/consumers are potentially interesting because it could mean that it is possible to break the relationship between affluence and environmental impact.

Part III of the book explores in detail a range of initiatives and cases that have been developed in different countries on a more international scale around behavioural change and sustainable lifestyle agendas. In Chapter 10, for example, Ashton-Graham and Newman examine the strategy of ‘sustainability coaching’ as an effective approach to mobilizing large-scale behaviour change, described and discussed in relation to Australian households. This case study chapter presents the methods, results and findings from the Living Smart Households project – an initiative developed by the Department of Transport in Western Australia to build upon successful behavioural interventions in small group sustainability and large-scale transport and water demand management. The authors demonstrate that a process of self-framing allows individuals with different environmental, monetary and practical attitudes to adopt pro-environmental behaviours. It is also shown that commonly held values (such as the importance of water conservation to West Australians) can be utilized, through the coaching practice of engaging households in expressing their values (self-framing), to trigger behaviour change in unrelated areas such as energy, waste and travel choices.

In Chapter 11, Bhattacharyya considers the implications of macro-level changes on India’s future energy needs. The chapter focuses on residential energy demand and uses the ‘end-use’ approach of demand analysis to evaluate possible effects. One of the key findings presented is that lifestyle changes are likely to have a considerable impact on future energy demand in India, but there is also the opportunity to follow a low-carbon pathway by adopting ‘smart’ technologies and creating efficient infrastructure. This, Bhattacharyya argues, requires a coordinated effort at various levels.

The difficulties and contradictions surrounding how the term ‘community energy’ can, or indeed should, be defined and used comes clearly into focus when considering a variety of such local-level initiatives and programmes in the USA. As Hoffman and High-Pippert (Chapter 12) discuss, decentralized or distributed forms of generation that are locally produced and/or consumed necessitate action at the local and community levels and the involvement of actors that can stimulate significant behavioural changes on the part of both households and local businesses. As the authors point out, however, in many cases ‘community energy’ initiatives are most appealing as rhetorical devices, useful for creating public support for otherwise controversial electrical projects. Drawing on a range of initiatives in the USA, the chapter addresses the question of how it might be possible to move beyond this situation when developing localized energy programmes.

In conclusion, the contributions to this book highlight both the promise and challenges of encouraging sustainable lifestyles as an intrinsic element

of the changes required for society to adapt to the constraints of the planet. Taken together, the theoretical, practical and political insights provided set out a useful and up-to-date reference point in terms of the similarities, discrepancies, opportunities and barriers of different countries' attempts to embed behaviour change more explicitly into their sustainable development policy strategies. The international case studies provide robust evidence to show that it is indeed conceivable to translate the theory through to practice and that it really is possible to reach and influence 'ordinary' people and households, in spite of their hectic lifestyles, myriad commitments and other day-to-day priorities. This is not straightforward however, and the well-rehearsed problem of how to connect with those in society who do not consider that lifestyle changes for the sake of environmental sustainability should have anything to do with them personally continues to pose a substantial challenge for policy makers, practitioners and community groups alike. It also requires differentiation of the concept of 'the public' into different roles, such as 'citizens', 'consumers', 'voters', and so on to understand levers, barriers, drivers and the decision-making context within which pro-environmental behaviour evolves.

The fact that information-intensive initiatives alone are not capable of achieving the scale of lifestyle change desired by the types of initiative described in the chapters of this volume has almost reached the status of 'received wisdom', backed up by an extensive and growing evidence base of failed projects and sustainability programmes that only attract very weak levels of participation and framed as the 'value-action gap'. Internationally, the politics of development also means that changing individual behaviour is not yet a priority at policy level for many national governments. From the findings and observations presented in this book, it is clear that while individuals will hold a much more central role in policies to promote sustainability, a much more broad-reaching and holistic set of approaches will be required in order to optimize the effectiveness of behavioural and lifestyle change programmes as a key element in the decision maker's tool box. This necessitates, above all else, a commitment to bringing out and incorporating the quiescent ideas, concerns, hopes and zeal of all stakeholders involved. Importantly, this must include householders and community members themselves – the people individually and collectively who will ultimately make or break any sustainable lifestyles agenda.

REFERENCES

- Brundtland, G. (1987), *Our Common Future*, New York: United Nations, World Commission on Environment and Development.

- Fudge, S. and M. Peters (2011), 'Behaviour change in the UK climate debate: an assessment of responsibility, agency and political dimensions', *Sustainability*, **3** (1), 291–302.
- Peters, M., S. Fudge, S.M. Hoffman and A. High-Pippert (2012), 'Carbon management, local governance and community engagement', *Carbon Management*, **3** (4), 357–68.
- Whitmarsh, L. (2008), 'Behavioural responses to climate change: asymmetry of intentions and impacts', *Journal of Environmental Psychology*, **29**, 13–23.