1

Introduction: A Consuming Issue

Now you can be green and gorgeous, eco-conscious and highly fashionable, simply by buying the latest climate-friendly consumer products. Never mind marching on Whitehall or Downing Street, or giving up flying: all you have to do to save the planet is shop (Lynas, 2007: 4)

Shopping to save the planet is big business. The products we buy and the consumer choices we make are imbued with social and ecological implications, which we are increasingly called upon to consider in a move towards more 'sustainable consumption' patterns. The burden of managing those impacts rests on the shoulders of individual citizens, to be weighed up and counted alongside the many other – perhaps more pressing – concerns of affordability, convenience, availability, fashion, self-expression and taste. In this way, responsibility for environmental governance and decision-making in its widest sense is shifting from central government to new sets of actors and institutions, at a range of scales from international coalitions to individuals (Jasanoff and Martello, 2004; Adger *et al.*, 2003). A recent consumer book on reducing the greenhouse gas emissions caused by everyday lifestyle actions, ambitiously claims to be 'the individual's guide to stopping climate change' (Goodall, 2007).

Consumer awareness of environmental issues is slowly rising, but contradictions remain. A recent study found that while 78% of the public say they are willing to do more to avert climate change, the majority were taking only tokenistic actions at present (e.g. recycling) and were not inclined to question 'sacrosanct' behaviours such as

car-driving, flying on holiday, meat consumption and so on (Downing and Ballantyne, 2007). If a 'green consumer' can choose between different models of energy-efficient car, but cannot choose a reliable, accessible, convenient and affordable public transport system, then the scope for individuals to effect societal change is limited from the outset.

Sustainable consumption has been studied from a range of perspectives: economic, sociological, psychological and environmental. This book opens up a new field of enquiry by presenting a 'New Economics' model of sustainable consumption which offers the potential for radical change in socio-economic practices; it challenges many tenets of mainstream policy and individualistic green consumerism. The book examines how an alternative vision of sustainable consumption is practiced through innovative grassroots community action, such as local organic food markets, and community time banks. It investigates how new social institutions and infrastructure are created from the bottom up, to allow people to make more sustainable choices in concert with others. The central aim of this book is to examine some of these 'seeds of change' and assess their potential for growth and influence in wider society, as part of a transition to more sustainable consumption.

Sustainable consumption: a new green agenda

The term 'sustainable consumption' entered the international policy arena in Agenda 21, the action plan for sustainable development adopted by 179 heads of state at the 1992 Rio Earth Summit. This was the first time in international environmental discourse that over-consumption in the developed world was implicated as a direct cause of unsustainability. The proposed solutions included promoting eco-efficiency and using market instruments for shifting consumption patterns, but it was also recommended that governments should develop 'new concepts of wealth and prosperity which allow higher standards of living through changed lifestyles and are less dependent on the Earth's finite resources and more in harmony with the Earth's carrying capacity' (UNCED, 1992: section 4.11). These two proposals – the former suggesting reform and the latter a radical realignment of social and economic institutions – represent competing perspectives of the nature of the problem and its solu-

tion, and illustrate some of the tensions inherent in a pluralistic concept like sustainable consumption. Here we will refer to them as 'mainstream' and 'New Economics' perspectives on sustainable consumption (see also Jackson and Michaelis (2003), Jackson (2004b) and Seyfang (2004a) for other reviews of sustainable consumption discourses).

From its auspicious beginnings at Rio, the sustainable consumption agenda has evolved through a range of international policy arenas (see for example OECD, 2002a), and become more widely accepted as a policy goal. The more challenging aspects of its original conception became marginalised as governments instead focused on politically and socially acceptable, and economically rational, tools for changing consumption patterns such as cleaning up production processes and marketing green products. So the policy agenda has narrowed from initial possibilities of redefining prosperity and wealth and radically transforming lifestyles, to a focus on improving resource productivity and marketing 'green' or 'ethical' products such as fairly traded coffee, low-energy light bulbs, more fuel-efficient vehicles, biodegradable washing powder, and so forth. Hence sustainable consumption is implicitly defined as the consumption of more efficiently produced goods, and the 'green' and 'ethical' consumer is the driving force of market transformation, incorporating both social and environmental concerns when making purchasing decisions. As Maniates notes, "'Living lightly on the planet" and "reducing your environmental impact" becomes, paradoxically, a consumer-product growth industry' (2002: 47).

There is widespread agreement that the affluent lifestyles of the developed countries must shift towards more sustainable forms of consumption – although there is not necessarily any consensus about what that might be. Despite a growing consensus at policy level, there is still fierce debate about what precisely sustainable consumption means, among civil society actors and grassroots organisations. A range of different scenarios exist, from exhortations to generate 'cleaner' economic growth, through to the actions of anticapitalist low-consumption lifestyle activists. In any given sector, wildly different prescriptions for sustainable consumption abound. In housing, for example, sustainable housing might be equally conceived of as high-technology eco-efficient modernity, or alternatively low-impact self-build straw-bale houses that recall a simpler,

more self-reliant age (Guy, 1997). Each represents a different idea of what sustainable consumption entails and should achieve, along with equally different prescriptions about what a sustainable society would look like.

In order to comprehend and unravel these contradictions, we need to find a way through the policy debates and conflicting models of sustainable consumption, to find a way of producing simple, coherent and above all, relevant strategies for sustainable consumption. There are a number of important questions to be asked: What drives current consumption patterns? Is it individual tastes and preferences, social institutions and norms, or processes of cultural identification? What links environmental concern with action? How do price and principle compete for consumers' attention when they make shopping decisions? And how can a more radical vision 'New Economics' of sustainable consumption be practised within a mainstream policy landscape?

This book aims to answer these questions by presenting a new synthesis of theory and fresh empirical work which examines sustainable consumption in action. To begin, this introductory chapter briefly sets out the problem and scale of unsustainable consumption, and then reviews current thinking on consumption drivers and the motivating forces which influence consumption decisions. Then two competing models of sustainable consumption are described: a mainstream approach and an alternative, New Economics model, in order to establish the primary theoretical framework for the remainder of the book.

Understanding unsustainable consumption

Economists see consumption in terms of the generation of utility, anthropologists and sociologists in terms of social meanings, and scientists in terms of the human transformation of materials and energy (Heap and Kent, 2000: 1)

What do we mean by consumption? The answer is not straightforward; it is the completion of economic circuits and the satisfaction of wants; it is the creation and maintenance of identity and lifestyles; it is the using up of resources; and for ecological economists, this resource use is limited by environmental constraints

within which all economic and social activity exists. Consumption is, of course, an essential process for all living things; we only achieve a zero-consumption lifestyle when we are dead. So our focus is not on consumption per se, but rather on the aspects of it which can be made more socially and ecologically sustainable – by which we mean able to meeting our own needs without compromising the ability of future generations to meet theirs (WCED, 1987).

Global consumption patterns are becoming a topic of increasing concern for politicians, environmentalists and social activists concerned with sustainability. It has become a much-quoted truism that consumption behaviour in developed countries must shift towards a more sustainable form, in order to address the enormous inequalities between rich and poor countries, while respecting environmental limits (UNCED, 1992; WCED, 1987; DETR, 1999). The 1998 Human Development Report describes the gross inequality of consumption patterns across the globe, and notes that while per capita consumption in industrialised countries has risen steadily, at an average of 2.3% annually, over the last 25 years, in Africa, household consumption is actually 25% less than 25 years ago. On a global scale, the 20% of the world's population in the richest industrialised countries accounts for 86% of the world's consumption (measured as private expenditure), while the world's poorest 20% have only 1.3%. The burning of fossil fuels, for example, has multiplied almost five-fold since 1950, and the pollution-absorbing capacities of the environment are threatened. A sixth of the world's land area is now degraded as a result of over-grazing and poor farming practices, and fish stocks are seriously depleted, with almost a billion people in 40 developing countries risking the loss of their primary protein source as a result of over-fishing driven by overseas demand for fish oils and animal feeds (UNDP, 1998).

As climate change has become the most pressing environmental issue facing humanity (IPCC, 2007), so too has the inequity of the consumption patterns which contribute to it been thrown into relief. The risks and benefits of emitting carbon dioxide into the atmosphere are sharply divided among the world's economies, with the developed word contributing the lion's share of emissions, while developing countries face the most dangerous impacts. Carbon dioxide emissions, a by-product from burning fossil fuels, are directly related to consumption levels through the energy used to manufacture,

grow, transport, use and dispose of products. While world per capita carbon dioxide equivalent (CO2e) emissions from fossil fuel use is 4.5t, it varies dramatically across countries, from 20.6 t in the United States, 9.8t in the UK, to 1.8t in Brazil and 0.1t in Ethiopia (UNDP, 2007). The UK's Climate Change Bill is expected to become law by summer 2008 (DEFRA, 2008), enshrining in national legislation the Kyoto Protocol target of reducing the UK's CO₂ emissions to 60% of their 1990 levels, by 2050 (this goal was first put forward in a 2003 Energy White Paper (DTI, 2003b). This target is intended to stabilise atmospheric concentrations of CO₂ at between 450-550 parts per million, which is assumed to offer a reasonable chance of keeping global warming to below 2°C, so avoiding the worst impacts of rising global temperatures (Schellnhuber et al., 2006). But new scientific evidence is emerging that this target is too low: the 2007/2008 Human Development Report points to the catastrophic impacts climate change will have unless stringent targets of around 80% cuts in greenhouse gas emissions¹ are set and adhered to in developed countries (UNDP, 2007). This translates directly into calls for radical changes in consumption patterns in industrialised nations. The UK Climate Change Bill focuses on the key contributors to the UK's CO₂ emissions, which for consumers relate to household energy use (fuel for heating as well as electrical power) and personal transport (private vehicle use and aviation).

However, the greenhouse gases embedded in what we as a nation *consume* are far greater than that in what we *produce*: developed countries export their carbon emissions to developing countries where manufacturing and processing occurs (Druckman *et al.*, 2007). The Carbon Trust's calculations of per capita CO_2 emissions are based not on production (the nationally-emitted CO_2 divided by population), but rather on consumption (tracking the emissions of all goods consumed in the UK), categorised according to 'high-level consumer need' (Carbon Trust, 2006: 1). A consumption focus high-lights the environmental impact of food and other consumer goods

¹Although scientifically incorrect, carbon dioxide emissions are often referred to in the literature as simply 'carbon emissions'. Furthermore, this measure normally includes a range of other greenhouse gases with different global warming potentials (such as methane, nitrous oxide and hydrofluorocarbons), converted to carbon dioxide equivalents. The correct term is therefore ' CO_2e '. However, the UK Climate Change Bill focuses exclusively on CO_2 .

and services produced overseas, which are commonly excluded from these calculations, and in turn suggests a different set of carbonreduction policies to one focused on household energy use and

these calculations, and in turn suggests a different set of carbon-reduction policies to one focused on household energy use and transport. By counting not only direct energy use, but also indirect (embedded) emissions, this analysis reveals that recreation/leisure, space heating, and food/catering are the three categories of consumer need which contribute the most CO_2 to per capita emissions, suggesting scope for reduction in terms of some quite different areas of lifestyle than government production-focused policy attends to.

A focus on consumption as a route to sustainable development reveals much about inequality and inequity which a more traditional production-focused approach would neglect. It calls into question not merely the commerce, business and industry behaviour that economic development is traditionally concerned with, but rather the lifestyles, habits, aspirations and routines of individual citizens and households – an area of life normally considered outside the sphere of regulatory attention. A consumption angle furthermore opens up hitherto neglected arenas of 'non-consumption' decisions, and 'non-market consumption' (Princen, 2002a). By going straight to the heart of modern lifestyles, a consumption focus demands that we examine our most mundane decisions and routines for their impacts and implications, and that we question the economic, cultural and social basis of 21st century consumer societies.

What motivates consumption?

How is consumption behaviour determined and maintained, and how may it be influenced to change? Fundamental to the task of achieving behaviour change is an understanding of what drives current consumption patterns. Within the context of sustainable consumption scholarship, there have been a number of broadranging reviews of theories of consumer behaviour, which attempt to map out the theoretical terrain of consumer motivations, most notably Røpke (1999) and Jackson (2004b), each of which provide an excellent interdisciplinary overview of key theories of consumption and consumption drivers, both in theoretical abstract, and in historically concrete examples, drawing on insights from economics, sociology, anthropology, politics, cultural theory and psychology. A comprehensive review of theories of consumer motivation is

beyond the scope of this book, and the multitude of approaches can be classified according to one typology or another, depending on the purpose of the specific analysis to hand. In any case, it is axiomatic that divisions between social theories and approaches to consumption are never clear-cut nor absolute, and that whatever analytical design is imposed on the literature is for the purposes of convenience and illuminating a particular dimension of difference. Inevitably there are grey areas and examples that fall in between one category and another, but it is hoped that the overall benefit of structuring the theories outweighs the costs of inaccuracy and imprecision at times. With these thoughts in mind, for the purposes of this book theories of consumption are divided into three broad categories (shown in Table 1.1). The first is a utilitarian approach to consumption, belonging within traditional neo-classical economics,

Theoretical approaches to consumer motivation Table 1.1

Type of Approach	Scale of Analysis	Decision- making	Consumption is	Example of Tools for Sustainable Consumption
Utilitarian	Individual	Cognitive information-processing on basis of rational utilitymaximisation	The means to increase utility	Green product labelling; tax incentives for greener products
Social and psycho- logical	Individual	Response to social contexts and psycho- logical needs	Marker of social meaning, cultural differentiator, and satisfier of psychological needs	Social marketing to 'sell' greener lifestyles as desirable e.g. through celebrity endorsement
Infrastruc- tures of provision	Society	Constrained by socio-technical infrastructure	Inconspicuous, routinised habit	Local food initiatives which bypass mainstream provisioning routes

which examines the behaviour of rational individuals in markets. The second looks at social-psychological drivers of consumption such as status display, group membership, and cultural norms, similarly at the scale of individual consumers. The third takes a societal perspective, and studies the socio-technical infrastructure and systems of provision which determine inconspicuous consumption behaviour. A fundamental distinction is made between individual and societal (structural) theories of consumption behaviour in order to better identify where responsibility lies for changing behaviour, and where the power of decision-making – and the scope for change – lies in each approach. However, following Giddens' structuration theory (Giddens, 1984), it is fully recognised that individuals are at the same time constrained by, and co-creators of, societal infrastructure, and that social institutions are reproduced through the daily actions of individuals. Each of these approaches is briefly reviewed below, exploring their theoretical and practical implications in terms of theories of behaviour change, as a basis for the subsequent discussion of sustainable consumption strategies.

The utilitarian approach

The conventional microeconomic view of consumption is derived in a rather circular fashion from assumptions about individual behaviour. It is axiomatic in neo-classical economics that individuals are rational utility-maximisers, that is to say they calculate and follow the course of economic action which brings them the most utility (benefit, pleasure or satisfaction) that they can afford. A typical microeconomics textbook states 'we assume that consumers seek to allocate their expenditures among all the goods and services that they might buy so as to gain the greatest possible satisfaction. We say that consumers try to maximise their satisfaction, or their utility.' (Lipsey and Harbury, 1992: 37). Individuals consume goods and services in free markets with perfect competition, and it is presumed that this behaviour reveals inherent preferences, and illustrates utility-maximisation, and so consumption acts as an analogue for human happiness or wellbeing. Questions of how preferences are formed, or how decisions are motivated, are sidestepped in favour of a 'black box' view of consumer preferences, so the theory rests simply on making inferences of value, based on consumer behaviour. In this approach, which underpins neo-liberal economic policy, economic

growth is considered a prerequisite for development, as it offers greater consumption opportunities and higher consumption levels – a proxy for human wellbeing – overall (DETR, 1999).

The utilitarian model of consumption assumes that decisionmaking is a linear cognitive process, that is an internal calculation of all available information to decide the course of action which will deliver the greatest utility. From this perspective, analysts 'seek the basis for consumption within the individual, through the mechanism of the satisfaction of needs ... [which] are produced internal psychological and cognitive processes, leading to choices within a marketplace of possibilities' (Wilk, 2002: 6). Therefore, efforts to promote sustainable consumption based on this model tend to rely on initiatives to correct market failures, and ensure that individuals have greater information to enact their consumer sovereignty. For example, the UK's Sustainable Production and Consumption strategy prioritises greater business efficiency and product innovation, consumer information campaigns and voluntary green labelling schemes. These are all initiatives to improve market functioning and information flows to the consumer thereby 'Encouraging and enabling active and informed individual and corporate consumers who practice more sustainable consumption' (DEFRA, 2003b: 6).

Consumer initiatives designed to promote pro-environmental behaviour based on this model similarly appeal to the rational individual actor with information on the impacts of particular behaviour, such as wasting energy. It is hoped that consideration of facts and figures will lead to 'logical' changes in behaviour, particularly where there are clear financial incentives for making the prescribed changes (again, energy efficiency delivers immediate cost savings). A good example of this approach in practice is the UK's 'Going for Green' awareness-raising campaign dating from 1995, and its successor 'Are You Doing Your Bit?' from the late 1990s. These government initiatives sought to provide information to consumers about environmental issues such as global warming and ozone depletion, pollution and resource use, along with advice on simple measures consumers could take to reduce their environmental impacts. They both took an 'information-deficit' approach to changing behaviour, assuming that people behaved unsustainably because they lacked information, and so aimed to overcome that barrier by delivering (expert) information to the lay public. Characteristically of this type of strategy, they achieved little in the way of behaviour change due to a complex range of factors why people failed to take the prescribed courses of pro-environmental action (Blake, 1999). The two campaigns were 'less than half-hearted, and ill-focused' (Environmental Audit Committee, 2003: 34), but led to much discussion of the newly-coined 'value-action gap' between what people claim to care about, and what they act on (Blake, 1999; Kolmuss and Agyeman, 2002). Burgess et al. review the literature on public attitude surveys and find that 'the remarkably rapid increase in public awareness of environmental issues and embracing of pro-environmental attitudes is coupled with virtually no substantive changes in behaviour at all' (Burgess et al., 2003: 271).

Social and psychological approaches

A wide range of studies and disciplines have questioned the mainstream model of economic activity, and have sought to better understand what motivates consumers to act as they do, and how that behaviour can be modified to promote more sustainable consumption patterns. Critiques have emerged from the sociological and psychological literature on the drivers of consumption, which aim to help explain why efforts based on the cognitive (information deficit) and market-based approaches to behaviour change have been so ineffective, even where information and pricing has strongly favoured more sustainable consumption. These analyses aim to understand and overcome the well-known 'value-action gap' which describes the disjuncture between knowledge, pro-environmental values and resultant action (see for example Jackson, 2004b). For instance, in a study of the factors which influence environmental commitment, Jaeger et al. (1993) found that technical information about specific environmental issues was a weak predictor of activism, as was demographic factors such as age, gender, occupational status. Instead, socio-cultural processes and shared rules, values and networks - ethical values and cultural solidarities – played a strong role in determining environmental commitment. The lessons drawn from this study are that the traditional assumptions about public ignorance and/or confusion about environmental issues are wrong – behaviour will not change simply through the provision of better quality information. This study, and a growing volume of later work from across the social science disciplines, suggests that the core factors which influence consumption decisions have barely been touched by an approach based on flows of expert knowledge to lay consumers – the basis of mainstream sustainable consumption policy (Jackson, 2004b, 2005; Burgess *et al.*, 2003; Røpke, 1999).

Taking as their starting point the social contexts within which consumption takes place, and the psychological needs which consumption is intended to satisfy, these studies conclude that consumption is much more than an economic act and the neo-classical conception of sovereign consumer as rational satisfier of wants is in decline (see, for example, Miller, 1995; Fine, 2002). Beginning with the most economistic of the non-utilitarian approaches to understanding consumption, the body of work known as 'behavioural economics' has shown that individuals do not act like 'rational economic want-satisfiers' in real life, and that this 'bounded rationality' has profound implications for policy (Dawnay and Shah, 2005). It finds, for instance, that in contrast to the principles of neo-classical economics, people's choices are influenced by what other people around us are doing and by social norms, and these can change over time (see Jackson, 2005 for a good review of social-psychological theories of consumer behaviour). Furthermore, norms and routines help to reinforce ingrained (unconscious) habits which 'use little nor no cognitive effort' (Dawnay and Shah, 2005: 5) and so are not subject to the rational cost-benefit calculations which orthodox economics assumes takes place when making consumption decisions. Other insights from psychology and experimental economics reveal that people have intrinsic motivations to want to behave in a publicspirited manner, and value fairness in economic outcomes, but that extrinsic motivations (fines and incentives) can crowd these out, resulting in a loss of value-driven behaviour (Frey and Jegen, 2001). For this reason, the system of donating blood has always been voluntary in Britain, for fear of actually reducing the level of donations by treating it as a commercial transaction rather than a citizenly act. Titmuss (1970) showed that where donors were paid in the US, donations fell and for obvious socio-economic reasons, donors were in poorer health than previously, resulting in lower-quality blood supplies. Another factor influencing people's behaviour is their own expectations of themselves, and a discontinuity between our attitudes and our actions (termed 'cognitive dissonance' by Festinger (1957)) can lead to a revision of the beliefs rather than the behav-

iour, thereby reversing the conventional assumption that actions follow values. However, making public pledges tends to encourage a modification of the behaviour to fit the attitude.

Experimental economics has further revealed that people are lossaverse, and that their 'willingness to accept' compensation for losing an asset far exceeds their 'willingness to pay' to keep it. This lack of parity between gains and losses contradicts neo-classical theory, and results in massive discrepancies between economic valuations of environmental resources, depending on how questions are posed (Pearce and Turner, 1990). Rather than being indicative of irrationality or lack of understanding, these computational 'anomalies' are in fact signifiers of the complex social contexts within which choices are made. Similarly, much has been made of how the framing of a problem influences how people respond (for example an intervention which keeps 80% of people alive is seen as preferable to one which kills 20%) and how intuitive judgements influence behaviour - all of which is anathema to the neo-classical economic model (Kahneman et al., 1991). Finally, the phenomenon of too much choice in a marketplace can result in information overload, confusion, inability to make a decision, anxiety about having made the wrong choice, and general demotivation about the efficacy of our decisions - all crucial issues for sustainable consumers (Levett et al., 2003; Schwarz, 2004).

The key message from this literature is that people do not act as isolated individuals, but rather as people-in-society; we do not respond simply to our innate wants and desires, but also and sometimes overwhelmingly to the influences of our peers and fellow citizens, our unconscious habitual routines and to social norms. As individuals our actions are strongly influenced by those around us, highlighting the importance of social networks, peers and institutions in shaping consumption decisions (Burgess et al., 2003; Jackson, 2004b). These studies demonstrate that people think of others' regard, wish to act for the greater good but only if others do the same, and resist the marketisation of some aspects of economic and social activity. In other words, consumption behaviour is strongly influenced by social pressures and calls to consume differently will be mediated through those contexts.

Taking a step further into sociology and anthropology, others have examined the ways that consumption decisions are intricately

entwined with meeting social and psychological needs. Patterns of material consumption exercised through the marketplace embody multi-layered meanings above simple provisioning and the goods and services we consume have enormous cultural significance, for example, aspirational consumption, retail therapy, self-expression, a need for belongingness, self-esteem, self-validation, a political statement, an ethical choice, status display, distinction, loyalty to social groups, identity, and so forth (Douglas and Isherwood, 1979; Bordieu, 1984). Consumption cannot be viewed as technically neutral; it is inextricably linked with values and social meaning, and are signifiers of cultural allegiance and social relationships (Jackson, 2007b). From this perspective, preferences are formed, not within individuals or as endowments, but rather between people in a dynamic manner. Consumption is therefore a moral activity, one that supports and strengthens particular forms of social solidarity, and which is symbolic of collective values and interrelationships (Douglas and Isherwood, 1996). Wilk asserts that 'Consumption is a social code and people consume to fit in or stand out' (Wilk, 2002: 7) and that 'people use goods to communicate to others, to express feelings, and to create a culturally ordered environment' (ibid.). Conveying status is one such function. For instance, social standing is commonly signified through the display of expensive material possessions, thereby making conspicuous consumption a desirable activity for its social meaning rather than its instrumental value. Hirsch (1977) uses the term 'positional goods' to refer to those items consumed by the elite, and so desired by the rest of society (they signify one's position in society). Once the goods in question are within the reach of wider portions of society, they lose their appeal, and attention – and desire – turns towards a new elite consumer product, thereby fuelling ever-greater consumption. An example of this is international holidaying to sea-and-sun beach resorts, which was until recently the preserve of the wealthy, and seen as a glamorous, exclusive activity. With cheap flights and international weekend breaks within the reach of the vast majority of westerners, these vacations have become commonplace and are even seen as cheap and brash; there is greater status attached to self-improvement activity holidaying and even to nostalgic returns to domestic camping trips – a reversal of the previous generation's values.

Goods have symbolic value, and the consumption of those symbols is an important aspect of who we are and the social world we make for ourselves (Jackson, 2007b). The fundamental point of these analyses is that efforts to reduce consumption for the rational consideration of the environment are doomed to fail because they do not acknowledge the complex motivations to consume which exist within western societies, and the vital social and psychological functions that consumption provides in terms of expressing identity, a sense of belonging, distinction and so on. These deep-rooted motivations must compete with rational appeals towards sustainable consumption, and as they tap into fundamental social and psychological needs, it is unsurprising that they usually triumph. Only by gaining an understanding of the deeper motivations to consume is it possible to envisage ways to begin meeting those needs from other, less materially-intensive goods and services which can equally well deliver the same intangible benefits. Within this framing of consumption, it becomes possible to envisage a strategy to encourage changes in consumption behaviour through shifts in public values, norms and expectations which have knock-on effects on individuals' actions. Indeed, as Burgess et al. assert, the importance of supportive social contexts cannot be overestimated: 'an individual cannot be expected to take responsibility for uncertain environmental risks in a captured market. It is asking too much of the consumer to adopt a green lifestyle unless there is a social context which gives green consumerism greater meaning' (2003: 285).

Employing the formidable armoury and experience of the advertising industry, 'social marketing' is the application of tools and techniques normally associated with influencing consumer behaviour for commercial benefit, to the objective of changing public behaviour for a social good – originally around health and family planning (Kotler and Zaltman, 1971). More recent initiatives have focused on proenvironmental behaviour, and in particular on not simply raising awareness, but fostering community-based, everyday behaviour change through altering contextual (interpersonal and situational) conditions, often in subtle and tightly-targeted campaigns aimed at particular demographic or lifestyle segments of the population (McKenzie-Mohr and Smith, 1999; Barr et al., 2006). Its strategic strength lies in tapping into the unconscious motivations for consumption which the advertising industry have so effectively mined for decades, and planting seeds of behaviour change through new associations and the marketing or 'branding' of pro-environmental behaviour as desirable, and

hoping that these small changes will lead to 'tipping points' (Gladwell, 2000) and catalyse wider behavioural transformations. For example, older people might be more receptive to recycling and waste reduction campaigns thanks to their experience of 'thrift' and 'make-do-and-mend' from previous generations, whereas younger population groups might be more receptive to emulating celebrities who choose not to fly, or use reusable shopping bags.

Social marketing has become one of the foundational elements of UK government policy for sustainable consumption, through its five-point model of behaviour change. It aims to encourage, enable, exemplify and engage, thereby aiming to catalyse shifts in attitudes and values, and influence the social context of behaviour, set norms associated with the realm of action, generate a sense of collective endeavour, and recruit the population in moving together towards a more sustainable future (HM Government, 2005). Recent UK government work has concentrated more on segmenting the public into groups of consumers who are, variously, able and/or willing to make more or less significant changes to their lifestyles. The aim is to target different proenvironmental behaviour messages to separate groups of consumers, with the objective of achieving small but potentially catalytic changes across society such as wasting less food, avoiding short-haul flights, installing insulation, etc (DEFRA, 2007a).

The infrastructures of provision approach

The discussion above has focused on motivations for behaviour in individuals, both as cognitive information-processing, and within wider social and cultural contexts. In each case the emphasis is largely on conscious and conspicuous consumption decision-making. A further body of work on consumption behaviour moves outward from the individual to examine collective decision-making and the creation and maintenance of contextual societal institutions, norms and infrastructure which constrains decision-making. In these cases, it is the routine, the habitual and the inconspicuous consumption which is studied. This is referred to here as an 'infrastructures of provision' school of thought on consumption, after Southerton et al. (2004) and Van Vliet et al. (2005), who examined the case of energy and water utilities. They note that 'institutions and infrastructures actively contemporary patterns of demand' (van Vliet et al., 2005: 6) by entering the home and creating co-dependent relationships between supplier

and consumer. The approach can also be applied to other systems of provision (for example food supply chains). Systems of provision are vertical commodity chains (comprising production, marketing, distribution, retail and consumption in social and cultural context) which mediate between and link 'a particular pattern of production with a particular pattern of consumption' (Fine and Leopold, 1993: 4), and this perspective highlights the meso-level infrastructure and institutions which individuals both create and are constrained by, as a form of societal 'structuration' (Giddens, 1984; Røpke, 1999; Sanne, 2002). These systems 'lock-in' individuals to particular patterns of consumption, thereby reducing the choices available to them, and at the same time severely limiting the scope of influence of their purchasing decisions, ensuring the reproduction of the infrastructure. For example houses connected to mains water systems are forced to use pure drinking water to flush toilets, and do not have the capacity to capture and recycle their own rainwater, so ensuring continued dependence on mains water provision. Spaargaren (2003) terms this a 'social practices' approach to sustainable consumption because it examines not simply attitudes or actions or structures, but rather bundles of lifestyle practices in different arenas, such as food, clothing, housing, and so on, which exist in between individuals and societal systems of provision. For example, choices about travel are made not merely on an individual basis, but in relation to wider societal decisions (about investment in infrastructure and so on) which determine the systems of provision and available choices. The resultant practices represent an interface between actor and structure.

Echoing this perspective, Sanne (2002) argues that rather than creatively expressing their identity, consumers are locked in to current socio-technical regimes (often determined by business interests), limiting the available choices they may make, and that they are not necessarily willing consumers at all. Similarly, Shove (2003) examines quotidian household practices such as bathing, and reveals how everincreasing standards of cleanliness in society counteract moves towards greater efficiency in resource use through norms indicating more frequent washing practices. Consumers are effectively trapped within particular consumption patterns and lifestyle practices by the overarching social structures of market, business, working patterns, urban planning and development (Sanne, 2002; Røpke, 1999). This has implications for locating agency and allocating responsibility: 'in the social

practices approach, the responsibility of the individual towards environmental change is analysed in direct relation with social structure' (Spaargaren, 2003: 690). For instance, Levett et al. (2003) argue that while the market defines an ever-expanding range of goods and services to choose from, it cannot, by definition, offer choices external to itself. A person might choose one brand of washing-machine over another because of its greater energy-efficiency, but what they cannot easily choose is to purchase collectively and share common laundry facilities among a local group of residents, or to redefine social conventions to reduce the socially-acceptable frequency of clothes-washing. Within the growing body of literature on societal transitions to sustainability, this level of infrastructure is described as the 'sociotechnical regime': namely that set of institutions, technologies and structures which set the rules and parameters within which individual actors may exhibit self-determination (Van Vliet et al., 2005).

Given that current systems of provision prevent significant changes in consumption patterns, what can be done to overcome this limitation? Alternative systems of provision, with associated social and economic institutions and infrastructure, require a foundation in alternative values, development goals, motivations and definitions of wealth (Leyshon et al., 2003). Advocates draw out the political economy of, and richer sociological meanings attached to consumption and point to collective institutions as the source of potential change (Maniates, 2002; Fine and Leopold, 1993), but the shift to new systems of provision is neither easy nor straightforward, given that it involves first contradicting and then challenging existing social institutions and socio-technological regimes. For example, efforts to change infrastructures of provision in the utility industries might suggest a shift to microgeneration and domestic energyproduction for greater self-reliance. Southerton et al. (2004) investigate initiatives such as these and draw some initial conclusions that indicate a range of unanticipated and at times counter-intuitive consequences, for sustainable consumption (see also van Vliet et al., 2005).

Hence in seeking to make the necessary changes to their consumption patterns, ecologically-motivated citizens 'see that their individual consumption choices are environmentally important, but that their control over those choices is constrained, shaped and framed by institutions and political forces that can be remade only through collective citizen action, as opposed to consumer behaviour' (Maniates,

2002: 65–66). By focusing on socio-technical regimes rather than individual decision-making, one can see that 'in consciously exercising our individual, incremental choices, we have sleepwalked into some larger choices and foreclosed others without even realising it. The market can be an "invisible elbow" shoving us into an unwanted corner, rather than Adam Smith's benign "invisible hand" (Levett et al., 2003: 47).

Perhaps the most fundamental system of provision which sustainable consumption addresses is that of continued economic growth and the capitalist logic of expansion. Efforts to counteract this continued economic expansion and instigate an economy of 'sufficiency' are, by definition, in opposition to the wider socio-technological regime of society. The transition to a reduced-consumption society 'cuts against patterns of thought and expectation that have been cultivated for generations' (Daly and Cobb, 1990: 373). Røpke (1999) identifies a range of economic factors at play at the macro level. These include the inherent pressures of capitalistic competition and commerce which relies on product innovation and diversification, advertising and want-stimulation, and which have expanded the commercial realm into previously private, domestic areas of life. In practice these trends are revealed as an increasing pace of life and product change, inbuilt obsolescence, deregulated credit and financial services to support growing consumption, and labour market institutions which propagate a 'work and spend' culture (translating productivity gains into higher incomes rather than reduced working time). Schor (1998) focuses on this particular aspect of modern society and concludes that a culture of insatiable desire drives the continual pressure to upgrade, improve, replace and recreate the material conditions of our lives, as witnessed through the modern fashion for personal and property 'makeover' shows, and the commercialisation of the domestic sphere. Similarly, Sanne (2002) finds that modern labour institutions are implicated in the reproduction of this 'work and spend' culture, and that individuals find it difficult to step off the treadmill as many societal institutions are geared to support – and reproduce – it, such as the convention of full-time 40-hour working weeks. Sanne concludes that 'Limited advances can be made by changing consumer habits but further progress demands that the political system overcomes the dogma of economic growth or redefines it in terms of individual welfare of a less materialdominated kind' (Sanne, 2002: 286).

Clearly, these manifold factors operate in concert, reinforcing each other and squeezing out alternative opportunities, in a cycle of continuous consumption which exists as a bedrock of modern economies and societies. Indeed, it is this recently adopted culture of consumerism which is the primary obstacle to sustainability, as social, economic and cultural factors contrive to embed materialistic values and a continual desire to consume more to achieve recognition, fulfilment, and worth. Røpke states 'The account of the driving forces behind the willingness to consume tends to be quite overwhelming: growth in consumption seems to be a very well-founded and understandable trend... Consumption makes sense to people, it concerns very important aspects of life' (Røpke, 1999: 416). Therefore efforts to address consumption issues and promote more sustainable behaviour must be equally multifaceted in their approach, taking an holistic and pluralistic approach which recognises the deeply-rooted social and psychological motivations to consume, as well as the technical and economic drivers.

Nevertheless, alternative systems of provision and social institutions which reject the mainstream imperative for economic growth do exist. Local food initiatives aim to establish new food distribution systems bypassing supermarket supply chains; community currencies aim to value and reward the unpaid work in society, incentivising mutual aid rather than competition; low-impact builders seek sustainable models of development which prioritises self-reliance and reduced consumption. They are all seen by their proponents as embodiments of different sets of values, offering a more sustainable infrastructure within which to conduct lives of sufficiency rather than continual expansion of consumption. How these 'seeds of change' emerge and function in opposition to their wider contexts, and how they might grow to spread their influence into the mainstream, is the core focus of this book.

Competing visions of sustainable consumption

Having reviewed the major theoretical strands of consumption behaviour, and the prospects they hold for encouraging more sustainable consumption, this section examines how those theories have been applied through the brief description of two competing models of sustainable consumption (which are discussed in greater depth in the next two chapters). Our analysis adopts a conceptual framework to

organise and usefully separate some of the many strands of thought and practice in sustainable consumption, into two main themes. While the dichotomous model presented is a simplification, grouping together many strands of thought that might otherwise not be considered together, the typology serves to fundamentally distinguish between those that favour incremental change (the mainstream policy approach) and wider, fundamental regime change (the New Economics alternative). These positions are briefly described below, and Table 1.2 summarises the contours of this heuristic device.

Table 1.2 Comparing mainstream and New Economics models of sustainable consumption

	Mainstream Sustainable Consumption	New Economics Sustainable Consumption	
Objective	Incremental improvements in resource efficiency; continual economic growth through 'consuming differently'	System-wide changes in infrastructures of provision to reduce absolute consumption levels by 'consuming less'	
Mechanism	Sustainable consumers send market signals for sustainably-produced goods and services, which drives innovation and improvement	Collective action reshapes socio-technical infrastructures of provision, creating new systems and non-market alternatives where necessary	
Consumers	Individual green consumers	Ecological citizens within communities of place, practice and interest	
Progress measured by	Traditional measures of economic growth; consumption as a proxy for utility (happiness)	New measures of sustainable wellbeing; consumption not necessarily related to wellbeing	
Theories of consumption	Utilitarian Social/psychological	Utilitarian Social/psychological Infrastructures of Provision	
Examples	Green and ethical consumerism; corporate greening of global capitalism; social marketing	Local provisioning e.g. farmers' markets; mutual aid e.g. LETS; self-reliance e.g. low-impact development	

It also shows that each of the two models of sustainable consumption rely upon different, but overlapping understandings of consumer behaviour.

The mainstream policy approach to sustainable consumption

In 2003, the UK Government announced its strategy for sustainable consumption and production which it defines as 'continuous economic and social progress that respects the limits of the Earth's ecosystems, and meets the needs and aspirations of everyone for a better quality of life, now and for future generations to come' (DEFRA, 2003b: 10). Two years later the UK government's Sustainable Development Strategy had quietly dropped the explicit imperative for economic growth and replaced it with a guiding principle of achieving a 'strong, stable and sustainable economy' and a call to move towards a 'one planet economy' (HM Government, 2005: 16, 43). But in practice, the policies and tools proposed were much the same with an emphasis on decoupling economic growth from environmental degradation, to be achieved through a range of market-based measures, and calling on informed and motivated citizens to use their consumer sovereignty to transform markets by demanding improved environmental and social aspects of production and product design (ibid.). Importantly, this consumer behaviour-change aspect of the strategy relies heavily on the cognitive (information-processing) approach to changing behaviour, and only recently has a more sophisticated – but nevertheless individualistic – social marketing perspective been formally adopted (DEFRA, 2007a). This mainstream policy approach to sustainable consumption has been criticised - not least by the government's own Sustainable Development Commission – on the basis of a number of significant factors which critics claim limit the effectiveness and scope of such a strategy (Porritt, 2003). These include market failures, category errors, disenfranchisement and inequity, and at heart, an inability to address the fundamental problem: 'How can consuming more of anything help us save the planet? The point is to consume less - and no one's going to make any money from that' (Lynas, 2007: 5). Critics therefore conclude that the mainstream approach is limited in scope, flawed in design, and unjust in its objectives. (Maniates, 2002; Sanne, 2002; Seyfang, 2004a, 2005; Southerton et al., 2004; Levett et al., 2003; Holdsworth, 2003; Burgess et al., 2003).

An alternative New Economics approach to sustainable consumption

An alternative theoretical approach to environmental governance and sustainable consumption is proposed by a broad body of thought known collectively as the 'New Economics' (Ekins, 1986; Henderson, 1995; Daly and Cobb, 1990; Boyle, 1993). The New Economics is an environmental philosophical and political movement founded on a belief that economics cannot be divorced from its foundations in environmental and social contexts, and that sustainability requires a realigning of development priorities away from the primary goal of economic growth towards wellbeing instead (Jackson, 2004a). It also stresses the benefits of decentralised social and economic organisation and local self-reliance in order to protect local environments and economies from the negative impacts of globalisation (Jacobs, 1984; Schumacher, 1993). Although its traditions go back much further (Lutz, 1999), the UK's New Economics Foundation was founded in 1986 to promote these ideas in research and policy (Ekins, 1986). At the same time, theorists such as Jackson (2007a), Ekins (1986), Max-Neef (1992), Douthwaite (1992), and O'Riordan (2001) are pursuing these ideas within the academic world, for instance by developing new measures of wellbeing, seeking to understand consumer motivations in social context, and debating how an 'alternative' sustainable economy and society might operate. By proposing that societal systems of provision be examined, redesigned and reconfigured in line with sustainable consumption goals, the New Economics proposes nothing less than a paradigm shift for the economy, or a wholesale transition in the presiding 'regime'. This implies that rather than making incremental changes, the model entails a widespread regime change for the economy and society, altering the rules of the game and the objective of economic development.

Unsurprisingly perhaps, this eclectic body of thought rejects economic individualism, and pays particular attention to the contextual – social, psychological and structural – factors which influence consumption practices. For example, whereas the mainstream approach to sustainable consumption relies on 'green consumers' playing their part in the marketplace, the New Economics instead addresses 'Ecological Citizens' who act ethically in public and in private to reconfigure the patterns of their lives to reduce environmental and social impacts on others (Dobson, 2003). The New Economics is fundamentally an equity-based understanding of environmental governance, drawing on 'ecological footprinting' metaphors to guide action. Ecological footprints define and visualise environmental injustice in terms of the inequitable distribution of 'ecological space' (the footprint of resources and pollution-absorbing capacity) taken up by individuals, cities and countries; this inequity requires a reduction in the scale of material consumption among the affluent advanced economies (Wackernagel and Rees, 1996).

Seeds of change: the New Economics in practice

This book critically assesses current mainstream policy responses to the sustainable consumption agenda, and consolidates an alternative, New Economics approach. It examines ecological citizenship at perhaps its most mundane, yet its most ubiquitous and fundamental, level: the choices and actions which individuals and households make on a daily basis, in the supermarket and on the high street. It deals with changing consumption patterns, consumer behaviour and lifestyles, and how these relate to environmental and social demands for sustainability. 'Sustainable consumption' has become a core policy objective of the new millennium in national and international arenas, despite the fact that its precise definition is as elusive as that of its companion on the environmental agenda, sustainable development. Current patterns of consumption are, quite clearly, unjust and unsustainable; the extent and nature of the transformation required is hotly debated, reflecting as it does competing deep-rooted beliefs about society and nature (Seyfang, 2004a). For some, it is sufficient to 'clean up' polluting production processes and thereby produce 'greener' products (OECD, 2002b; DEFRA, 2003b); for others, a wholesale rethinking of affluent lifestyles and material consumption per se is required (Douthwaite, 1992; Schumacher, 1993).

Chapters 2 and 3 examine these two positions in greater depth, highlighting the theoretical foundations of each perspective. While the mainstream approach is well-represented in policy frameworks, the New Economics perspective currently exists largely outside this world. Nevertheless it is strongly represented by networks of grassroots initiatives and community activists, many of them inspired by the Rio Summit itself, working to challenge existing practices, and create new social and economic institutions which allow people to

express these ecological citizenship values in their daily lives (Church and Elster, 2002; Seyfang and Smith, 2007). Consequently, much practical New Economics work on sustainable consumption involves innovation and experimentation on a small scale, in the hope that successful practices will grow and expand, so influencing wider mainstream systems of provision. Chapter 4 (co-authored with Adrian Smith) sets out a major theoretical framework for the book, a conceptual lens through which the later empirical work is viewed. New ideas about innovation and transitions in socio-technical systems are applied to grassroots community-based experiments for sustainable development, bridging two previously unrelated areas of theory and policy, by seeing them as innovative green niches. We distinguish between market-based (usually technological) innovations, and community-based (usually social) innovations, and begin to explore the implications of viewing the grassroots as a neglected site of innovation for sustainable development. The challenge is to identify how niche social innovations can grow and spread into mainstream society, and to articulate a theory of change within an approach that might otherwise emphasise the constraints of social infrastructure too heavily (Smith, 2007).

There then follows a series of thematic discussions on aspects of sustainable consumption within the New Economics approach, looking at three fundamental areas of provision: food, housing and finance. Each of these chapters presents case studies of grassroots innovations which attempt to actualise the theory through practice, and brings empirical research to bear on theory through evaluative studies. Chapter 5 examines sustainable food, and reports on a local organic food cooperative which aims to provide a socially just and ecologically responsible system of food provision, bypassing supermarket distribution channels in favour of farmers' markets and directly supplying consumers. The threats posed by mainstream supermarkets seeking to attract customers interested in local and organic foods are outlined, to assess the scope for alternative initiatives like this to survive mainstream competition. Chapter 6 addresses housing provision and presents cases of innovative builders aiming to improve the sustainability of building technology and develop socially sustainable models of housing provision, but who find themselves on the margins of mainstream housing provision regimes, struggling to achieve wider influence. Here the scope for innovations to challenge and

influence mainstream processes is examined. Chapter 7 turns to finance, and describes a range of complementary currencies, which are assessed for their contribution to sustainable consumption. These are alternative monetary tools which aim to overcome structural weaknesses in mainstream money, by incentivising more sustainable behaviour. The relationship between the alternative economic space, and the mainstream regime of work and income distribution is discussed.

Finally, the book concludes with an assessment of the state of the New Economics of sustainable consumption in theory and in practice, and its outlook for the future. It reflects on the empirical discussions, and applies transitions management theories to reveal common experiences across all three areas in terms of niche-regime dynamics. These suggest that bottom-up New Economics initiatives do have the potential to influence wider society, but their oppositional framing means that they fail to resonate strongly with the mainstream regime, preventing the successful translation of ideas. They also require top-down support and policy space, in which to grow and thrive. Measures to address this failure are discussed, drawing on existing knowledge of innovation systems and applying them to this new context, but there is much work to be done. A new policy and research agenda is presented to enable the innovative potential of grassroots innovations to be harnessed for sustainable development.