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Context

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1 Introduction

1.1 Background

It has become clear in recent years that current European consumption and production patterns are not sustainable and cannot be transferred to the rest of the world without overstressing the carrying capacity of Earth in terms of provision of environmental services and extractions of natural resources (ETC/SCP, 2009). In order to achieve fair standards of living across the world, changes in consumption and production patterns in Western world are necessary (European Commission, 2008a).

Responding to concerns regarding climate change and sustainability, governments and businesses promote better production technologies and green the markets by offering ecologically and socially sound products. However, despite the increasing share of environmentally sound products on the market (due to technological innovation), the aggregate environmental impacts from consumption of goods are still increasing due to the sheer number and volume of material products on the market (level of affluence) and their growing use by the rising number of consumers (population) (ETC/SCP, 2009). In Europe, direct pressures from production have been partially decoupled from increasing production volumes and even in some cases stabilised, e.g. GHGs and resource use. However indirect impacts of European consumption are shifting overseas (ETC/RWM, 2006; Røpke, 2001). Typically between 25-75% of national environmental pressures are embodied in imported goods depending on the size of the country (Watson and Moll, 2008).

At European household level, three domains – food, mobility and housing – are responsible for up to 70% of GHGs emissions, other air emissions and resource use (Tukker, Huppes et al., 2006). Consumption of food and drink is responsible for 20% of GHG emissions, 20% originate from mobility and 30% - from construction and use of housing (ETC/RWM, 2006; ETC/SCP, 2009). Despite the efficiency and production improvements, environmental impacts from households are rising (Moll and Watson, 2009): the number of cars on the roads is growing, leisure trips are becoming more frequent, longer in distance and shorter in time (Ecorys, 2008); the ownership of household appliances is growing, and the size of housing per person is on the rise (Eurostat and European Commission, 2009). The rise of air travel has been phenomenal, with an increase in the level of international air passengers from 88 million in 1972 (ICAO, 2007) to 760 million in 2006. It is projected to grow to 980 million international passengers in 2011; domestic passenger numbers are projected to increase from 1.37 billion in 2006 to 1.77 billion in 2011 (IATA, 2007). Consumption of electricity from space and water heating, and waste generation is also increasing, even in Europe (ADEME, 2007). The levels of meat and dairy consumption and the consumption of processed food and meat are also mounting not only in Europe, but also globally: in 1965-2005 global food consumption and production increased 2,5 times (EEA, 2005), leading to increased environmental impacts. The outlooks for various consumption domains also signal increases: car "... ownership is set to triple by 2050, trucking activity will double and air travel could increase fourfold" (IEA, 2009b); "global food production needs to increase more than 40% by 2030 and 70% by 2050, compared to average 2005-07 levels ... [and] some 1.6 billion ha could be added to the current 1.4 billion ha of cropland" (OECD, 2009b).

Many of the efficiency improvements in these domains have been negated due to so-called *rebound effects* (Herring and Sorell, 2009). One example is fuel efficient cars, which allowed people to drive further or more often for the same amount of money: so while efficiency increased, total fuel use from driving outstripped this efficiency saving, which was compounded by people travelling further to work and vacation, and the emergence of driving

as a free-time activity. Similarly, as energy efficient lights use much less electricity people tend to leave them on for longer, thereby reducing the predicted energy savings. The rebound effect may also cause reduced efficiency / energy-use increases in other areas: for example, when people save money from installing energy efficient equipment in the home, they may spend it on potentially carbon-intensive behaviours, e.g. flying on holiday more often (Platt and Retallack, 2009).

These examples demonstrate that in order to harvest the full potential of improvements of production efficiency and product design, a thorough understanding of the multi-faceted aspects of consumption behaviour is required (OECD, 2002). This, however seems to be a bottleneck for many policy-makers. Being used to addressing a relatively limited number of large actors operating according to profit-making logic, it becomes a challenging task to develop policies that address millions of consumers who have very different values, life goals, aspirations and desires, who react differently to various policy instruments and strategies directed at them, who listen and follow different role models, and who respond differently to various channels through which policy messages are communicated. Sociological and psychological research studies a great variety of factors that affect consumption behaviour and this knowledge might become a vital precursor to developing successful environmental policies, particularly because profound changes in both the technological and socio-cultural spheres will be necessary in order to reach sustainable consumption and production patterns and levels.

So far, poor understandings of the factors affecting consumption have unfortunately precipitated policies directly or indirectly addressing consumption, leading to unrealistically high expectations of outcomes of some policy instruments, to a lack of efficient implementation of promising policy instruments or to proliferation of some ineffective policy instruments. For example, a number of recent studies have demonstrated the limitations of information-based instruments that are particularly popular with policy makers when attempting to address consumption-related impacts. Researchers have shown that when information-based instruments are used alone, they are rarely effective: knowledge does not directly lead to changes in attitudes, and attitudes in their turn are not always translated into behaviour - the reality is far more complex (Jackson 2005, Hounsham 2006). Despite this knowledge, the recent European Action Plan on sustainable consumption and production puts much value on the information-based instruments (European Commission, 2008a), but fails to provide a consistent picture of how they can be supported by other types of instruments, which could altogether increase their efficiency. Another example is the European Ecodesign Directive that outlines criteria for stimulating the development of more environmentally sound products (European Commission, 2005). This is a very important policy tool. The efficiency of which, however, depends on consumer willingness to buy environmentally sound products and on their behaviour when these products are used. People might buy energy-efficient bulbs, but leave the lights on all day long, knowing that energy used is much less than from using traditional bulbs. Similarly, the efficiency of ecolabelling directive depends on consumer knowledge about the meaning of the label and on their willingness to pay the premium for eco-labelled products. These examples demonstrate the importance for policy makers to understand the complexity of factors that shape consumption and consumer behaviour from a multi-disciplinary perspective. As expressed in OECD (2002) report *“prior to engaging in changes, it is important to understand the factors behind individuals’ and societies’ decisions on consumption in the first place. These decisions are formed by factors that range from personal preferences and tastes, to ways individuals and countries balance their accounts. It involves both marketed and non-marketed goods and services. It is influenced and influences information and technological development. Above all, it is*

dynamic, which means it is subject to change with time, for the better – more sustainable – or for the worse”.

1.2 Objective

Understanding consumption behaviour is a complex task: looking at consumption from a societal perspective, we can see that purchasing and behaviour decisions are influenced by many factors, including economic influences, marketing of products and technological innovation, regulations governing consumption, and not least by what the people around us and in the media are doing. The complex interactions between these factors result in the consumption patterns and levels that Europeans think of as “normal”, but which in fact are unsustainable and may bring us less happiness and life satisfaction than we imagine. A deep understanding of processes that shape consumption patterns and levels is needed if we are to promote sustainable ways of living. In order to assist policy makers with increasing the effectiveness of their policies, it is thus important to understand what factors shape and influence people’s consumption behaviour and what barriers hinder them from taking actions towards sustainable consumption patterns. This study focuses on understanding factors that shape consumption patterns and levels in modern Western societies.

The main goal of this study is to review evidence on factors that shape and affect consumption so that we can better understand the complexity of consumption and what needs to be taken into account when policies tackling consumption are being devised.

1.3 Conceptual framework

Attempts to understand consumption behaviour have typically fallen into two camps: one describes consumer behaviour as determined by context and infrastructure – including physical infrastructure, taxation and pricing policies, technological innovations etc, while the other holds consumer behaviour to be the result of psychological and social drivers.¹ Neither of these approaches is sufficient in isolation: a holistic perspective approach is required in order to understand how various political, technical, social and economic drivers overlap and influence each other in creating our consumer society. A more thorough understanding of these complex factors will facilitate the development of more effective policy solutions. This paper aims to contribute to this understanding by outlining research on different perspectives on consumption, and highlighting potential points of intervention to promote sustainable consumption.

Chapter 2 outlines factors that influence consumption patterns from economic, political and technological perspectives, while chapter 3 highlights understandings of consumer behaviour from the social sciences perspective. As this distinction is somewhat arbitrary, reflecting academic standpoints rather than experiences of consumers, we have attempted throughout the study to highlight how the driving forces contribute to the overall systems of consumption that most people have an active role in. Chapter 4 explores the implications of these factors for sustainable consumption and potential learning for policy interventions – as well as noting the important role of groups and individuals that choose alternative lifestyles with lower levels of material consumption. Chapter 5 brings together conclusions about the interdependence of these factors, and the importance of remembering the complexity of the drivers of consumption when planning for sustainability.

¹ This is described as the ‘actor-structure’ dualism or debate, see e.g. (Giddens, 1984: p. 2)

1.4 Methodology

The study is a desk-top study of existing body of literature in different academic disciplines dealing with consumption: political science, economics, sociology and psychology, anthropology, history and ecology. The following data sources were used: ELIN and Lund University Library, ProQuest and EBSCO, Social Science Research Network SSRN, Political Science Network PSN, OECD-Website on ongoing and completed research, SCORE network (library), and many others.

The study also draws on contributions of professionals who participated in the expert workshop on consumption influencing factors that was held in December 2008 at the EEA.

1.5 Intended audience

This study aims to assist policy makers in the difficult task of understanding what influences and shapes consumption patterns and levels and how policy makers can devise policies that take into account the great number of different consumer behaviours, different social groups and various factors that affect them. Thus policy makers per se, as well as various policy agencies are the primary audience of this study. Further, anyone interested in origins and reasons for consumption may find this study useful.

2 The role of policies and market forces

Contemporary consumption levels and patterns are shaped by the entire history of industrial development. The industrial revolution of the 18-19th centuries in developed countries solved the largest problem of the society at the time – the underproduction. Technological progress and increasing productivity stimulated by competition led to increased production volumes, and businesses needed to find customers to buy these increasing volumes of products. The increasing volumes of products needed to find their customers. Therefore, together with reduced product prices, strategies for stimulating consumption – advertising and marketing – were instigated and continue to develop until today. At the same time, there was and still is a clear tendency towards increasing incomes, leading to the growing purchasing power of individuals, which being guarded by sovereignty principle, also leads to increasing consumption (Galbraith, 1958). The increase in production volumes is associated with economic growth and the consumption of products is often linked to happiness. This perception is also supported by prevailing economic and political institutions (Mont, 2007).

In order to better understand institutional forces that shape consumption patterns and levels, the following sections will investigate the economic, regulatory, technological and market forces influencing consumption.

2.1 Socio-economic framework

2.1.1 Economic framework

Neoclassical economists argue that tastes and preferences of consumers are given and cannot be influenced - the *consumer sovereignty* principle (Silberberg, 1978), and can only be efficiently satisfied by the market. According to the neo-classical perspective, policy makers should be reluctant to instigate measures that intervene in consumers' sovereignty and should treat the consumption domain as being beyond the reach of legal influence. However according to other schools of thought, tastes and preferences do change in the long term under influence of education, advertising and cultural assumptions (Norton, Costanza et al., 1998). Consumer sovereignty is often used to justify the deficit of consumption oriented policies even though the notion per se is clearly questionable. First of all, the sovereignty of consumer

is purely ephemeral because consumers make their decisions while being influenced by a number of social, contextual, and psychological factors, not in isolation and not only based on individual preferences. Consumers are heavily influenced by provided information, marketing and advertising and even become locked-in in their decisions and practices by products and infrastructure. Secondly, there are several product groups, such as tobacco, alcohol, drugs and firearms, markets of which have been regulated by governments despite the sovereignty principle. Nowadays, no one questions the governmental control of these substances, since they affect human health, but the interference into the sphere of products that have adverse environmental effects are often heavily criticised by industry representatives.

According to neoclassical economics, one of the main drivers of consumption is the insatiable need of individuals to *maximise their utility*. Utility is maximised through a process of choosing among different alternatives available on the market (Lancaster, 1971; Michael and Becker, 1973) (Toumanoff and Farrokh, 1994). Consumer choices and consumption levels can be influenced by income and price. In this simplistic model, the main prerequisite for consumption and the main limiting factors, assuming adequate supply of goods and services at market prices, are the availability of income and time to consume or rather their allocation between different product and service alternatives (Becker, 1965). Thus, policy makers and businesses have a possibility to influence consumers' demand and thereby shape consumption patterns and levels by influencing prices and income levels. This understanding leads to proliferation of financial mechanisms in economic sphere, e.g. taxes, tax relieves, subsidies, etc.

The level of *income* that influences consumption depends on personal skills, amount of time for work and how well the skills are applied in producing value-added (i.e. labour productivity). Generally, higher incomes are possible along with the increasing workers' qualification and technological improvements, which provide higher labour and resource productivity and in turn reduce manufacturing costs and final prices of products and services. Since the levels of consumption are directly linked to the available budget, consumers are assumed to be interested in increasing personal incomes², which is possible by raising productivity, i.e. producing more using less of the production factors (labour, capital, technology or resources) to maintain high level of output. This may lead to over-supply and the resulting price drops and rebound effects, which in turn can promote consumption (and result in higher environmental impacts).

Increasing income may also have another contribution to consumption in the form of *savings* if there is a surplus between income and expenditure. In this case, the excess of income is turned into savings, which eventually end up as investments, which further contribute to the economic growth and/or increase of productivity.

Besides income, competition of financial institutions offering attractive *credits* to consumers is another important factor stimulating consumption. Research demonstrates the direct correlation between residential prices and consumption growth, since people tend to borrow money using the value of their homes as collateral (Barata and Pacheco, 2003; Iacoviello, 2004). In many countries this situation leads to the accumulation of consumer debt (Cohen, 2007). The misuse of credit can lead to personal and national budget over-shoot and result in personal bankruptcies or (inter)national financial crises. Financial crises have a damping effect on people spending. A study of the Asian crisis of 1997-1998 (Ang, Leong et al., 2000)

² It has been suggested, however, by Easterlin (1973) that happiness depended on relative, but not absolute income; relative income being one's income level compared to the level of income of one's reference group (Easterlin, 1973).

and Mexican peso crisis 1994-1996 (McKenzie, 2006) identified the following strategies employed by consumers: more comparative shopping; delaying purchases of expensive items; buying smaller packages and reducing overall levels of consumption, extending information search, substituting by cheaper brands, purchasing local rather than foreign brands, placing more emphasis on product durability and functionality; and buying more often at discount and neighbourhood stores. Some of these behaviours, such as buying cheaper goods and buying more often at discount stores are also supported by evidence from the 2002 Argentinean financial crisis. A study demonstrated that although the total quantity and real value of goods purchased fell during the crisis, consumers were found to be spending more days shopping. This enabled households to seek out lower prices and locate substitutes, allowing them to buy more goods with the money available (McKenzie and Schargrodsky, 2005).

Incomes have been generally rising in Europe in recent decades, while savings ratios have simultaneously fallen in many countries, partially as a result of credit becoming more easily accessible. People with bigger disposable incomes and/or larger credit have higher possibility to consume more goods and services. The financial crisis in the second half of 2008 may have temporarily changed this trend. Prior to the credit crisis, it was relatively easy for most consumers to access credit, as retailers and lenders provided a wide range of different payment methods, allowing consumers a high degree of flexibility to make purchases. The development of banking and payment networks, financial markets, and various technological advances all contribute to changing the way that consumers purchase goods. This can be witnessed in terms of both the number of bank cards issued and the number of automated teller machines (ATMs) available to customers. It is becoming technically easy for the majority of European consumers to pay for goods and services, whether they happen to be doing their shopping in a retail store, online or by mail. However, in the future, it seems likely that credit, at least for a period, will be less easily accessible (Eurostat and European Commission, 2009).

In addition to purely economic parameters (prices, incomes and savings) there is an immense pressure from producers through the advertising media, which stimulates consumers to buy new products before the old ones are worn out or when they become unfashionable (see section 2.3.2). Brulle and Young (2007) discover that the “primary determinants of personal consumption are personal disposable income and advertising expenditures”. The link between advertising expenditures and consumption is particularly strong in the field of luxury goods, to a much lesser extent in the field of basic commodities. The combination of the existing financial settings in terms of the availability of credits combined with the pressure of advertising facilitate the creation of the “work and spend” culture (Schor, 1999b), which stimulates consumption. The increasing monetisation of relationships between people and institutions, as well as by the failure to account for environmental externalities that make material products cheap in comparison to personal services also contributes to the “work and spend” cycle. The work and spend cycle is characterised by people buying more and more products instead of spending more time on doing things themselves or together or in exchange with other people in their social network.

Another important factor that influences consumption is working hours. Along with increasing personal incomes, productivity growth should (in theory) reduce work time and provide more opportunities for leisure. The reduction of *working hours* does take place (e.g. in most of the countries in Western Europe), but at a rate that is far below productivity growth, and in some countries, e.g. Japan and USA, working hours tend to increase. One explanation can be found in the existing institutional structures and economic settings between the employers and the employees. For example, working long hours has become a norm for many salaried workers in the USA and Japan, because this signals their loyalty to

the employer and gives prospects for salary increase in the future based on seniority. In the “hours-invariant” forms of employment, an employee working overtime does not cost the employer extra, while the employee perceives it as a chance for career advancement (Schor, 1991b). Higher incomes and less free time may lead to increasing consumption, e.g. buying toys for children to compensate for lack of time spent with them or to purchase different time-saving energy-using devices (Segal, 2003). The question of whether time gained from shorter working hours is spent on non-commoditised activities or on more consumption is still debatable (Sanches, 2005) vs. (Jalas, 2002).

Shop opening hours is another time-related factor that directly influences consumption patterns and levels, by increasing the flexibility of shopping experience. Studies show that despite the advent of convenience shops and online shopping, an average consumer spends about 38 min shopping for consumer goods per day (Bureau of Labour Statistics, 2003). Having suitable shopping hours is therefore an important factor that affects when, what, where and at what price products are consumed. For example, the changing lifestyles of modern consumers toward becoming more flexible and harried, mean that night-time supermarkets are highly appreciated by parts of population (Geiger, 2007). With increasing incomes, buying in night-time supermarkets that allegedly have higher prices³ becomes less of a barrier for modern consumers, who are willing to pay for convenience and 24/7 access to goods. Shop opening hours is one of the supply factors that define the total time spent on shopping activities. Other supply factors include household income or family life cycle, while structural factors include location of the retail outlet and the amount of time spent at work and leisure activities (Arndt and Gronmo, 1977; Jacobsen and Kooreman, 2005).

Although seeing *consumption as a proxy for well-being* is one of the main drivers of consumption, a growing number of scholars suggest that material wealth fails to provide happiness. Rather the opposite - social life and leisure suffer as one’s time and energy are directed to obtaining more money and material goods (Dominguez and Robin, 1993; Durning, 1995; Elgin, 1981; Wachtel, 1983). Indeed, many consumers in modern industrialised countries feel trapped in a work-and-spend cycle trying to compensate excessive stress and widening social and cultural vacuum through increasing consumerism (Schor, 1999b). Both Scitovsky (1992) and Easterlin (1973) argued that since satisfaction with life is culturally determined, the increase in income does not automatically lead to improved perceived well-being as views on wealth and poverty adjust over time (hedonic adaptation) and are dependent on the comparison with social peers. Easterlin (2003) demonstrates that subjective well-being correlates well with the level of education, health and marital status and not very well with income.

“People make decisions assuming that more income, comfort, and positional goods will make them happier, failing to recognize that hedonic adaptation and social comparison will come into play, raise their aspirations to about the same extent as their actual gains, and leave them feeling no happier than before. As a result, most individuals spend a disproportionate amount of their lives working to make money, and sacrifice family life and health, domains in which aspirations remain fairly constant as actual circumstances change, and where the attainment of one’s goals has a more lasting impact on happiness. Hence, a reallocation of time in favour of family life and health would, on average, increase individual happiness”(Easterlin, 2003).

³ Economic studies investigating whether longer shopping hours lead to increased prices show contradicting results.

Thus, increasing per capita consumption does not necessarily lead to improving the level of well-being, but may instead reduce quality of life of individuals as well as bring about harmful effects on the environment (Mont, 2007).

2.1.2 Policies and instruments

There are very few direct policies or instruments that target consumption and/or consumers, for example Consumer Policy. There are however a number of various policies and instruments that indirectly affect consumption. According to OECD classification, there are three types of policy instruments: regulatory, economic and information-based and they will be briefly described in this section.

“Government policies and practices send important signals to consumers about institutional goals and national priorities. They indicate in sometimes subtle but very powerful ways the kinds of behaviours that are rewarded in society, the kinds of attitudes that are valued, the goals and aspirations that are regarded as appropriate, what success means and the worldview under which consumers are expected to act” (Jackson, 2006a: 120).

Many policies and policy instruments have direct or indirect influence on consumption patterns and levels. It is impossible to describe all of them here, but the most important ones are presented and their influence on consumption outlined below.

Market-based economic competition is a strong driver of the continued increase in consumption (Røpke, 2009a). The goal of *competition policy* is to ensure that there is free and fair competition in the European Union, which should improve efficiency of the markets through increased efficient allocation of resources across markets, prompt efficient organisation of production within companies and increased innovation on the market (Directorate-General for Enterprise, 2007). Organisations responsible for the implementation of the competition policy control mergers and prevent cartels, which would otherwise be in a position to fix prices, limit production or share markets or customers between the involved companies (European Commission, 2004). The competition policy ultimately aims to offer consumers a better deal through reduced prices, and to develop new and innovative products. For example, despite anti-monopoly and anti-cartel measures, competition policy usually does not prohibit agreements between companies regarding sharing research and development costs or technology transfer costs that stimulate innovation on the market. In effect, however, competition policy does not specifically distinguish between competition that is good for sustainable society and that which is not. There are however some clauses in the policy that have a positive effect on consumption from the sustainability perspective; the prohibition of imposing unjustified trading conditions, for example, when a market leader makes the sale of one product conditional on the sale of another product. However, the direct impact on consumption in the light of sustainability is not straightforward.

Innovation policy typically focuses on process of promoting technical innovations at national and regional levels (European Commission, 1995).

“Innovation policy originates from science and technology policies, but it adopts a much wider perspective, paying attention also to markets and commercialisation” (Hayes, Tojo et al., 2008).

It supports and stimulates emergence of new products thereby indirectly contributing to increased consumption. On the other hand, innovation leads to the emergence of more environmentally sound products, which reduces the consumption impacts of products. However, it has been shown that efficiency improvements are often compensated for by

increased levels of consumption – the so-called rebound effect (Berkhout, Muskens et al., 2000; Hertwich, 2005; Sorrell, 2007). Another important feature of innovation process is its speed, which seems to be increasing in the last decades, urging consumers to buy new products even if old versions are still functional (Cooper, 2005). Truly revolutionary products are few and far between, but new, slightly-changed versions of old products enter market every week leading consumers to believe that there is a continuous flow of innovative products and services on the market. Innovation as a process is also sometimes responsible for creating “artificial” human needs by inventing products that are not demanded by the market. However, once a technical feature has been developed, marketing and advertising are used to create needs and wants for that feature among consumers. Innovation policy supports and protects supply-side driven innovation and often lacks comprehensive understanding of consumption processes within environmental limits primarily because these issues are simply outside its main focus area. Innovation policy has, therefore, received significant criticism in recent years from environmental and sustainability scientists.

When it comes to specific measures that affect consumption patterns of individuals, the role of policy makers has been to protect consumer sovereignty and consumer rights for access to products and services of decent quality that do not adversely affect human health (Commission of the European Communities, 2005). These goals are specifically defined in the *European Consumer Policy* strategy for 2007-2013: empower consumers, enhance their welfare and effectively protect them. The communication from the European Commission outlines the aims of the European Consumer Policy as to “*equip ... the consumer with the skills and tools to fulfil their role in the modern economy; [to make]... markets deliver for them and [to ensure] ...effective protection from the risks and threats they cannot tackle as individuals*” (Commission of the European Communities, 2007). Specific goals are to:

- “To empower EU consumers. Putting consumers in the driving seat benefits citizens but also boosts competition significantly. Empowered consumers need real choices, accurate information, market transparency and the confidence that comes from effective protection and solid rights.
- To enhance EU consumers’ welfare in terms of price, choice, quality, diversity, affordability and safety. Consumer welfare is at the heart of well-functioning markets.
- To protect consumers effectively from the serious risks and threats that they cannot tackle as individuals. A high level of protection against these threats is essential to consumer confidence” (Commission of the European Communities, 2007).

One specific illustration of the application of the consumer policy regarding enhancing consumer’s welfare is to reduce costs of consumer problems. For example, consumer problems in Sweden cost each Swede approximately €280 Euro a year in the form of non-functioning product or poorly performed service. Although these costs might not seem too high, at national level they amount to €2 billion, which corresponds to 0,8% of Sweden’s GNP (Regeringskansliet, 2006).

Although Consumer policy plays an extremely important role for securing fair and equitable access to goods and services across the EU, it has been criticised for lacking ambition with regard to addressing total levels of consumption, although the recent Communication acknowledged that the European Consumer Policy “... *can provide the market tools to empower citizens, as consumers, to make sustainable environmental choices*” (Commission of the European Communities, 2007). Swedish parliament passed a bill in 2006 stating that the overall objective of consumer policy should be “*secure consumers who shop sustainably*” (Regeringskansliet, 2006). But even in this document sustainable consumption is defined in

terms of promoting eco-labelled and Fair Trade products. This is clearly an example of the cultural expression of what is legitimate in our societies to regulate and what social contracts exist in modern economies.

Trade policies accelerate resource extraction and consumption by connecting countries and regions rich in natural resources (typically economically developing countries with low consumption levels) to countries of high demand for these resources (typically economically developed countries with high consumption levels). The current trade system thus reinforces the unequal distribution and consumption of resources in the world. In addition to inequality issues, the current trade heavily relies on transport of these resources and goods as the distances between the resources and consumers have drastically increased in the past several decades. Some studies estimate that processed food in the United States travels over 1300 miles and fresh produce travels over 1500 miles before it reaches the consumer (Hill, 2008). Volumes of trade are also escalating. According to a recent study, the value of trade was “60 times higher for manufactured products, 10 times higher for fuels and mining products, and 7 times higher for agricultural products” in 2006 compared to 1950 (SERI and Friends of the Earth, 2009).

The reason for inequalities among the regions is not only different availability of resources in various parts of the world, but also the economic position and power of countries (Eisenmenger and Giljum, 2006). Economically developed countries typically export manufactured goods with high value-added, while developing countries mainly rely on the export of raw materials. European countries are among the highest net importers of natural resources, including fossil fuels and metal ores and agricultural and forestry products (Weisz, Krausmann et al., 2006). Europe has net imports of fodder used to feed animals to produce meat and dairy and it produces more meat and milk than it needs for own use. These products are therefore sold to other countries, especially developing countries. The problem however is that due to producer subsidies prescribed by the Common Agricultural Policy the surplus of meat and milk is sold at below world market prices, which adversely affects farmers and local markets in developing countries. This is one example of how governmental policy can worsen the imbalance in international trade and adversely affect consumption levels and patterns in different parts of the world.

Another example demonstrates how businesses and governments sometimes collaborate and deliberately stimulate material- and energy-intensive consumption. One example is the changing North East Asian consumption patterns towards Western lifestyles. These new ways of being affect and change the traditional ways of life in many countries and lead to higher resource consumption and more unsustainable lifestyles (Kasa, 2003). For example, many Asian economies had for centuries relied on a much more sustainable and self-sufficient fish diet. Lately, however, under pressure from Western economies, they are becoming increasingly dependent on beef-based diet, which is much more energy intensive (Durning, 1992). Another example is the US response to the European development programme to help small banana growers in Grenada (Schor, 2005a). In these cases, instead of moderating production volumes of certain goods as response to reduced demand or to improved environmental standards, aggressive trade policy and marketing pressure by well-organised international producers often imposes unsustainable products or production methods on other countries (Kasa, 2008). Often, international financial organisations, including IMF, support such measures and directly contribute to unsustainable growth (Kasa, 2003).

Besides regulatory instruments outlined above, economic instruments also play important role in shaping consumption. For example, one of the economic instruments that influence the purchasing power of consumers is *taxes and charges*. The level of taxes on various products and services clearly influences the final price and thereby directly affects consumption

patterns and levels. One example is the difference in mobility patterns between Europe and USA, which can be partially explained by the tax system on fuels. According to many studies, European taxes on gasoline resulted in more energy-efficient vehicle fleet, less driving and more extended use of public transport systems (Görres and Cottrell, 2008).

Since policy-makers use premises of the neoclassical economics and results of the neoclassical analysis as guidance, they support the goal of continuous economic growth and translate it into the growth that is largely based on material- and energy-intensive production and consumption. In order to maintain GDP growth, many policies *under-price natural resources* relative to social costs. This takes place in the form of governmental subsidies, due to poorly defined property rights and due to market failure to incorporate the (negative) externalities linked to the use of natural resources (Arrow, Dasgupta et al., 2004).

The third type of policy instruments that has influence on consumption are information instruments. Product labelling is one example of an information instrument used to provide consumers with positive, negative or neutral information about product qualities. Negative labels include different types of warnings and are usually displayed on hazardous products. An example of a neutral label is the signs on plastic bottles indicating from what type of plastic the bottle is made of to facilitate correct sorting of bottles and in the final end to facilitate plastic recycling. Positive labelling includes eco-labels. These indicate that a product is environmentally sound – these are so-called type I eco-labels according to ISO classification (ISO, 1996). Other types of information-based instruments include awareness raising campaigns regarding for example smoking or drink-and-drive, or promoting more healthy eating habits or exercise.

2.2 Technological innovation and infrastructure

2.2.1 Technological innovation

The Industrial Revolution was one of the most important drivers for reaching current standards of living and levels of consumption, and technological innovation undoubtedly played a key role in it. The increase in work productivity achieved through the division of labour and technological modernisation lead to a giant leap in production output of both industry and agriculture which in turn allowed increased consumption levels. Since 1750 the global industrial output has increased by factor of 100 and in the last hundred years – has grown 40-fold (Grübler, 1997). Since the population increased at a much slower pace, this means an steep increase in per capita consumption levels. Scientific and technological innovation contributed to this process in three ways (Braun, 1995) by:

- Replacing labour with capital, resources and energy, leading to increased labour productivity and rising levels of per capita production and consumption;
- Developing large number of new products and services that did not exist before and the need for which was not apparent until they had been designed;
- Increasing efficiency of production processes leading to decreasing costs of goods and services, stimulating their consumption.

Specifically, the development of general-purpose technologies, such as electricity, internal combustion engine, and communication technology, triggered consumption (Grübler, Nakicenovic et al., 2002). Developments in medical science and technology have also indirectly increased consumption level by decreasing infant mortality, lengthening life expectancy, and by introducing new drugs and increasing possibilities for medical intervention (McKeown, 1988). Technological development lead to increases in population in industrialised countries during 19-20th centuries, but recently technology transfer to

developing countries has been named as the main cause of the global population explosion (Ehrlich and Ehrlich, 1991). Specifically, energy technologies are responsible for population increase (Pimentel and Pimentel, 1996).

To keep the economic wheel turning and satisfy the growing number of consumers with the growing number of products per capita, production systems are made increasingly efficient in terms of labour productivity, but experienced a much slower increase in resource productivity, with consequent adverse impacts in the form of increased resource extraction and escalating pollution to the environment. The current system of mass production develops and manufactures relatively *short-life products* (Cooper, 2002), with planned obsolescence becoming a science in its own right. For example, cars can potentially be designed and built to last 30 years (Stahel and Reday, 1976/1981), but the average life time of a modern car is about 10-15 years – they became fashion items as many other products. Computers, TVs and phones - complex products with highly energy-intensive production processes – all have shortening lifespans, after which they are discarded, creating large flows of toxic e-waste (Slade, 2006). The positive effect of shortening life cycles is that replacement products might be more efficient. However, looking at the car market, fuel efficiency only started to improve in the last few years and thus upgrading of cars before this time can hardly be justified from the resource use perspective. Designing products for durability, repair and reuse is not economical, as labour costs in developed countries are prohibitively high, while costs of resources are relatively low. A Finnish study demonstrated that during 1981 - 1994 the price of new TVs increased by 20%, while the cost of repair work rose by over 150%; the figures for washing machines were 40% and 165%, respectively (Consumers International, 1998: p.20). Consumers are encouraged through advertising and marketing to replace still functioning products for new ones to maintain consumption levels. For example, the E-SCOPE survey found that 30% of discarded appliances were still functional and of those that were broken, a third were classified as “in need of repair” as distinct from “broken beyond repair” (Cooper, 2004).

The market mechanism usually helps to move a good from the realm of *expensive novelty* to the realm of *affordable mass products*, which enables consumption levels to increase. Practice shows that wealthy individuals are more likely to consume luxury items and are typically early adopters of a new technology absorbing initially high costs of innovation. As soon as the market for the early adopters (usually wealthier consumers) saturates, the manufacturers may choose to lower their profit margins or produce similar, but simpler and cheaper products in order to reach mass consumer (EC IST, 2001). A car was a luxury item in early 1920s, but became affordable to larger groups of American and European consumers as incomes grew in 1950-1960s.

As technological improvements are made, the price of new technologies drops and demand increases, allowing the suppliers to benefit from the economies of scale. As the production volumes increase, so does the competition, which further presses down the prices making products more affordable and available to masses. This leads to *increasing number of products per households*, up to 20-30 (IEA, 2009a) and after the point of market saturation may lead to ownership of several items by one household. For example, it is common that a family owns more than one phone and computer, TV and DVD-player and gaming machine, etc (Cole, 1997: p. 225).

“By 2010 there will be over 3.5 billion mobile phones subscribers, 2 billion TVs in use around the world and 1 billion personal computers” (IEA, 2009a).

All these gadgets are bought because they provide value to people, e.g. knowledge and entertainment, which contributes to their well-being. Studies demonstrate that across the

world people with TV ownership report higher level of well-being compared to people who do not own a TV (Pelham, 2009). On the other hand, studies also demonstrate that overuse of TV, computers and the Internet may also lead to poor health, higher stress levels and other negative side-effects: “long TV hours are also linked to higher material aspirations and anxiety” (Frey, Benesch et al., 2007).

Technologies generated as stand-alone products at first, may later give rise to a number of *support products* or to *new product systems*, infrastructures, social practices, institutions and even entire cultures. For example, “*the purchase of a new iPod may lead to the recognition of a need for accessories, such as a dock, attachment for the car, or a carrying case*” (Belch and Belch, 2007: p. 108). The increasing number of cars had influenced infrastructure development and town planning, creating car dependent societies comprising road network, traffic police, road administrations, driving schools, etc. (Sachs, 1992). Increased availability of cars was followed by longer distances travelled and by urban sprawl, by longer commuting to work and by longer distances to shopping places (Røpke, 1999).

Similar patterns of rebound effects can be traced in the example of *appliances*. Technological progress created a variety of household appliances that became more and more affordable with the increasing income, leading to market saturation for many of appliances. More than 50 million large and 200 million small appliances are sold in Europe every year (Haase, 2001). Most of the appliances are designed to save time and ease everyday household work. For example, more than 200 million hours are freed up from household chores every day due to appliances (Haase, 2001). Thus, mechanisation of the household creates empty time slots, but also fills them with more and more diverse work (Schor, 1991a). For example, while time was saved with the mechanical laundry, technological progress and increasing income allowed buying more diverse clothes, which require more time for separate washing, much more diverse washing programmes, various washing powders and drying techniques (Mont and Plepys, 2007). Changes in socially accepted norms also play their role – the levels of cleanness prevalent half a century ago are no longer acceptable (Shove, 2003), so eventually people are “forced” to spend more time on laundry.

In recent decades technology has been instrumental in spreading Western lifestyles through the Internet, other media and travel (Huesemann and Huesemann, 2008). While fuel based transportation technologies have enabled transportation of products across the globe, the Internet and TV have helped businesses to entice people who used to live relatively simple and low-impact lives towards highly resource intensive and unsustainable lifestyles. In 2006, 83% of world population had access to TV and 21% - to the Internet (World Bank, 2008: p. 310). The Internet became a powerful marketing channel, improved consumer access to information, created a perfect frictionless market with abundant information and close-to-zero transaction costs, which expanded markets in terms of time and space. The “one-click-shopping” e-commerce has dramatically changed the way we find, chose and buy products and services. For example, in 1991, there were less than 3 million users of the Internet worldwide. The number of Internet users reached 250 million by 1999, out of which 25% used different types of online transactions, resulting in a total value of \$110 billion (Coppel, 2000). On September 30, 2009 the total number of Internet users in the world reached 1, 734 bln users (Internet World Stats, 2009).

In addition to the influence on e-commerce, the Internet has also changed the structure of households’ use of time. Some studies demonstrate that in addition to 3-4 hours that people in OECD countries spend on watching TV, they spend 2-3 hours surfing the Internet (OECD, 2009a), while other sources show that the Internet actually substitutes the time for TV watching and diversifies the leisure time of individuals providing a more diverse range of entertainment possibilities (Robinson, Kestnbaum et al., 2002).

To sum up, technology is one of the main drivers of consumption; and although it led to significant improvements and increases in standards of living in Europe in the last centuries, it also led to increased levels of consumption and thus also the current environmental problems associated with consumption. Some of the unintended effects of technology improvements are called rebound effects and four types of rebound effects can be distinguished (Greening, Greene et al., 2000):

- *direct rebound effects*, which lead to increased use of products that became cheaper due to increased efficiency of production;
- *secondary rebound effects*, which lead to increased use and purchase of other products and services due to increases in incomes, e.g. consumption of other energy services;
- *economy-wide effects* take into account the interrelationship of prices and outputs of goods and resources in different markets and their adjustment to each other in order to reach a “unique stable equilibrium state for the economy as a whole” (Greening, Greene et al., 2000: p. 391);
- *transformational effects* are changes in technology that lead to changes in consumer preferences, social institutions and affect the organisation of production.

The size of the rebound effects has been the subject of a heated debate in the last 20 years, but majority of energy efficiency specialists agree that rebound effects, in the fields of energy consumption, are significant, although it is almost impossible to calculate their exact level. Some evaluations of *direct rebound effects* demonstrate 10-30% reductions of the achieved efficiency for fuel efficient cars (Greening, Greene et al., 2000) and for improved space heating technology (Haas and Biermayr, 2000). So direct rebound effects are relatively small. *Secondary rebound effects* are usually much larger and they lead to increased per capita affluence and consequently to increased consumption. Recent studies also demonstrate that “*economy-wide rebound effects are larger than is conventionally assumed and that energy plays a more important role in driving productivity improvements and economic growth than is conventionally assumed*” (Sorrell, 2009: p. 1456).

The role of technology in reaching more sustainable society will be discussed in section 4.1.3.

2.2.2 Infrastructure

Urban planning and construction policies steer public investment in infrastructure and thereby largely shape consumption patterns. Infrastructure is an essential enabling factor for growth of consumption. Its development is partially linked to the cycles of innovation and partially to the changes in demographic trends in society. The latest innovation cycle seems to have emerged in 1990s associated with the innovation of information and communication technologies and consequently, the rapid development of related infrastructure (Michaelis, 2000).

Infrastructure has been seen as both a constraint (Bauman, 1990a) and a driver of consumption (Cowan, 1983; Otnes, 1988; Warde 1997). The very nature of infrastructural networks can explain this duality: stability and access on the one hand and rigidity and lock-in on the other hand. Infrastructure comprises collective socio-technical systems accessible for many users and supported or run by many actors. These systems comprise systems for provision of water and sewerage, electricity and systems for waste management, telephone lines and others (Van Vliet, Chappells et al., 2005). They usually require consumption in their own right, according to Warde (1997), whilst encouraging further consumption of associated products. They create a mutual “pathways of dependency” (Arthur, 1994) between social and technical parts, between users and providers, between investments and long pay-back periods,

between the present and the future. Large investments into these systems stimulate the natural desire of the investors to increase their use or their consumption in order to accelerate return on their investments. In addition to these features, infrastructure has a relatively long life. Therefore, systems of provision may, at a certain point of time, become a barrier to change. This relates to road and bridge networks, as much as to communication lines and electricity grids. One example that can illustrate how infrastructure becomes a burden to society is the telephone landlines network in industrialised countries. With market saturation of mobile phones, the traditional landlines become outdated. It is therefore a strategy for developing countries to leapfrog the stage of infrastructure development for telephone lines and directly invest in mobile network systems.

“Transport and communication infrastructures, the housing stock and the built environment generally are, for most individuals, as much a fixed condition of life as is the “natural” environment. The inertia inherent in infrastructure can lock consumers into particular consumption patterns for the medium to long term. The importance of personal car travel in OECD countries, for example, is a result not only of its convenience and status, but also of the policies, land-use decisions, and technology and infrastructure investments of the past half century that have facilitated and promoted private car mobility” (OECD, 2001).

It is interesting to note in this respect that policies and other decisions in society are very much influenced by private individuals who have vested interest in promoting specific technologies and/or particular systems of provision. It has been described how the power alliance of the 20th century comprised governments, transnational companies, financial institutions and media that influenced consumption patterns and social norms through “narrative and symbol” (Michaelis, 2000). One example is the “road lobby”- an alliance of actors that played a prominent role in early developments of road infrastructure and road transport in different countries. Even in recent years, the strength of this coalition has made it challenging for alternatives to the private car to penetrate the mainstream market.

The idea of pathways of dependency shares certain similarities with the idea proposed by Sanne on “lock-ins” (Sanne, 2002). The lock-in notion highlights how daily practices, technologies and systems of provision are locked into each other and shape consumption patterns and levels. The most exemplary and interlinked areas are housing and mobility. The existing settlement structure and associated planning procedures for construction of new cities shape people’s behaviour for many years to come. In turn, people’s wants and needs also affect the settlement structures. For example, people prefer living in low-density one-family housing, and this is one of the main contributors to urban sprawl. This facilitates the development of highly dispersed communities, affects the distances travelled by people to/from homes and places of work and shopping. Covering these distances largely relies on using private cars, sometimes several cars per family.

A widespread car culture enables retailers to move premises to city outskirts reachable mainly by car and thereby creating social inequality by restricting access to shops for car-less people. This move also deteriorates city centres and shifts not only shopping, but cultural life to shopping malls, since they nowadays combine also movies, ice ranges and bowling halls. In a way, the restructuring of retailer infrastructure leads to deterioration of the “high-brow” culture consumption, such as theatre, and promotes lower levels of mass culture.

In addition to growing personal transport, the international infrastructure of transport is also expanding with globalisation and the dissemination of information and communication technologies. These trends greatly affect infrastructure and consumption patterns: availability of information technologies extends people’s social networks and contributes to increased

travel distances, which all together feedbacks into escalating demand for transport system, both local, regional and international.

Path-dependency, lock-in effects and daily practices, together demonstrate that consumption is shaped by many production processes, by the provision of certain products and services, and by certain routines when products are used (Southerton, Chappells et al., 2004).

People do not usually have much choice but to use the available infrastructure (Chappells, Klintman et al., 2000). On the other hand, there is a definite trend in people becoming a part of system of provision through, for example, individual wind-power units, and other technological solutions that reflect a much larger trend: a shift from large economies of scale to decentralised units of local productions. The effects of this trend on the total levels of consumption and on consumption patterns is however largely unknown, although some initial studies have been conducted, e.g. (Mirata, Nilsson et al., 2005).

The importance of infrastructure in promoting more sustainable lifestyles is discussed in section 4.1.4.

2.3 The role of business in promoting consumption

2.3.1 Business models

“Arguably, the strongest driver of this cultural shift has been business interests”
(Worldwatch Institute, 2010: p. 11).

In the classical market economy the main goal of business is to make money by generating profits. The main traditional way for companies to make profit is to continuously increase sales of material products linking the volume of profit to the number of products sold. The traditional business model is being perfected all the time to reduce all the expensive inputs and to find various ways to stimulate consumption. As a result, several features characteristic for the current market economy can be identified:

- linear economy supported by the throwaway mentality of producers and consumers that is based on economies of scale of both production and consumption,
- planned obsolescence: manufacturing of short lived average or low quality products, and
-
- ever-growing demand of consumers for new products and services.

The emphasis of the market economy on efficient process technologies has led to an enormous increase in labour productivity – on average a factor of 20 in 150 years (Lehner, Bierter et al., 1999) – but on the other hand this emphasis on market economy has not resulted in anywhere near the same level increase of resource productivity, leading to the current global environmental problems. Planned obsolescence, which is *“the production of goods with uneconomically short useful lives so that customers will have to make repeat purchases”* (Bulow, 1986) is the main building block of the throwaway mentality that turns the wheel of the modern economies. Proponents of planned obsolescence argue that short lived products maybe a necessary condition for the technological progress and that a pattern of rapidly deteriorating products and fast innovation may be preferred to long-lasting products and slow innovation (Fishman, Gandal et al., 1993) and could ultimately serve as a driver for economic growth.

“Any method that can motivate the flow of merchandise to new buyers will create jobs and work for industry and hence national prosperity... Our custom of trading in our

automobiles every year, of having a new refrigerator, vacuum cleaner or electric iron every three or four years is economically sound” (Whiteley, 1993).

Experts opposing this view, supported by a handful of businesses, claim that many products are designed with unjustifiably short life spans, requiring consumers to repurchase too frequently, which leads to increasing volumes of waste from society and to increasing resource consumption and pollution from production facilities (Stahel, 1991), (Stahel, 1994a), (von Weizsäcker, Lovins et al., 1997). In order to prove the technical feasibility of designing for long life, some pioneer companies employ design strategies for durability and recycling, e.g. Xerox, DuPont, Interface. Others propagate the so-called service economy as an alternative to the throwaway society (Stahel, 1994b), in which negative impacts from slower throughput of products are offset by repair services, reuse of products and remanufacturing activities. In practice, however, there is little happening that could indicate that the shift to the service economy or wide spread remanufacturing activities is taking place.

On the contrary we witness the emergence of ever shortening fashion cycles with companies and retailers advertising new clothing collections every week. New business models have also been developed to stimulate increasing consumption by expanding the main principles of successful production into consumption sphere: efficiency, predictability, calculability, and control (Ritzer and Ovadia, 2000). This trend has been coined McDonaldization by Ritzer (1993) and is based on the ideas of rationalisation that was developed by classical sociological theorist Max Weber (Weber, 1968), who predicted the extension of rationalisation from production to other spheres of life, including consumption. Similar ideas reflecting commodification, rationalisation and globalisation of business models and consumption patterns can be found under the names of McDisneyfication (Bryman, 1998) and Coca-Colonisation (Prendergrast, 1993). Another business model that promotes mass consumption is the model for fast moving consumer goods in the discount branch. This model is characterised by a relatively limited choice of products offered at a discounted rate. The continued growth of the discount retail branch indicates that in some spheres of consumption consumers prefer less choice and lower prices.

2.3.2 Marketing and advertising

Since “*lifestyles boil down almost entirely to styles of consumption*” (Bauman, 1990b), people’s individual identity expressed in their lifestyles can be read almost entirely from the package of goods and services people surround themselves with. Today, consumer choices are strongly influenced by media, advertising and the behaviour of celebrities (Boykoff and Goodman, 2009; Henderson, 2005). With the increasing consumer exposure to different media channels, such as radio, televisions, newspapers and the Internet, the power of media to shape consumer preferences is steadily increasing.

In 2008 global advertising expenditures reached \$643 billion (Worldwatch Institute, 2010). Nowadays one American person sees more advertisements in one year than s/he saw in a lifetime 50 years ago and is exposed to 3000 ads per day (Brower and Leon, 2009). Even other cultural media that are not directly associated with advertising, such as public debate, popular music and movies, the visual arts and novels, all shape the way we consume and how we relate to material products. However, one needs to remember that only the channels for the advertisement and promotion of fashion have changed; fashion *per se* has been a driving force of some types of consumption for centuries (Berg, 2005).

Besides the increasing pressure and the sheer volume of the advertising industry, there are ongoing changes in the advertising messages and how they are transferred to the

simultaneously changing target audience. Several types of changes in the advertising and marketing messages and how they affect consumption are outlined below.

First of all, the nature of needs that ought to be satisfied by the advertising industry is changing. Since the basic needs of most people in modern industrialised economies are being largely fulfilled, there is a need to continuously create new needs. In this task, the role of technological development and innovation is irreplaceable. Designers from a number of IT and white goods companies have revealed that often a technical solution is invented and then advertising and marketing is used to create a need among consumers that this invention satisfies, leading to increased consumption of the often material inventions.

Following the need to continuously stimulate higher consumption levels, the nature of the marketing and advertising is changing. While previously advertising mostly focused on product performance, nowadays it aims to create consumers who are unsatisfied with what they have and therefore advertising increasingly targets feelings, rather than provides information. From being solely a push strategy its becoming more and more a pull strategy, e.g. buzz marketing (Kotler, Wong et al., 2005): capturing attention of consumers and the media to the point where talking about a brand becomes entertaining, fascinating, newsworthy and desirable. To support this trend, advertising is changing from being mainly verbal to being more visual (Söderlund, 2006). Selling feelings rather than information is closely linked to another trend that not merely products are being sold, but entire lifestyles. Together with advertisements of specific goods, entire lifestyles and spaces are being advertised; brand names become associated with certain lifestyles, e.g. Zara or Laura Ashley lifestyle and companies sell different product lines from cloth to furniture, home styling products, etc. to represent a certain lifestyle. The result is that often the marketing strategy of products is a stronger determinant of success than product quality (Dahlén and Lange, 2003).

The advertising industry is also expanding its audience, diversifying to children (Barber, 2007) and re-developing gender differences, which creates a playing field for developing and selling products customised for the different target audiences. For example, according to Schor (2004), an average 10-year-old has memorised about 400 brands, the average kindergartner can identify some 300 logos and already from the age of two kids are “bonded to brands”: a two-year old while not being able to recognise a letter M has no problem recognising the golden arches of McDonald sign (Worldwatch Institute, 2010). Recent years have seen the explosion of gender studies regarding the difference in responses and messages when it comes to marketing and advertising of different products and services to women versus men, e.g. (Dahl, Sengupta et al., 2009; Khairullah and Khairullah, 2009).

Another interesting trend affecting consumption patterns and levels is the change in perception regarding the role of consumers. While before people were seen largely as passive agents at the receiving end of the advertising message, they are now recognised as more active audience, dynamically choosing the types of messages directed at them, actively decoding and interpreting messages and using various messages and types of media for various own purposes (Morley, 1995). In the past, consumers were typically brand-loyal, but recently consumers have become less committed, requiring speed of delivery, flexibility and interchange, leading to shorter and shorter fashion cycles which drastically increases consumption levels in society, stimulates production of low quality products for the sake of turn-over, and promotes throwaway culture among consumers. Thus, brands can no longer survive on a strong brand name; they must continuously communicate with consumers, using both internal (product-related) and external (price, brand name, etc.) reminders (Apéria and Back, 2004), as well as the transmission of brand names by celebrities and trend-setters. Brand names do, however, still play a strong role for many consumers, serving as an

information carrier: facilitating and routinising the purchasing process, and as an identity creator⁴ (Lyngåker and Säfström, 2008).

One of the latest additions to the marketing portfolio is the employment of neuroscience, which enables marketers to understand how consumer decisions are made, even when consumers themselves cannot explain their behaviour (Belch and Belch, 2007). One impetus for the application of neuroscience in marketing is that consumers are overloaded with information: “consumers are overwhelmed by commercial messages, and advertisers know it” (Belch and Belch, 2007: p. 103). Marketers and advertisers are turning to neuroscience to make sure their advertisement reaches the correct part of the brain, and does not get lost within the constant stream of “marketing noise”. Neuroscientists also categorise people according to neurological patterns:

“At one extreme are the “cool fools” who tend to be compulsive or impulsive shoppers who respond to celebrities and “cool” brands with bursts of brain activity. At the other end are those who tend to be more anxious, apprehensive, or even neurotic and who react intensely to unstylish items. Still others purchase out of fear or anxiety that they may not be seen as sufficiently stylish” (Belch and Belch, 2007: p. 104).

These categories resemble some of the categories in lifestyle segmentations (see section 3.3.2).

To help address the problem of “marketing noise” and to safeguard the truthfulness of the information contained in advertising and marketing, policy measures have been introduced in recent years in many countries to ensure that the consumer information on the market is correct and not misleading. One of the latest additions in this respect is the EU Directive 2006/114/EC concerning misleading and comparative advertising (Commission of European Communities, 2006). The latest area that this type of legislation covers is the environmental and ethical claims of companies. It is usually consumer protection agencies that police such claims.

3 The role of people and social forces

Consumer behaviour is commonly perceived to be driven by rational decision-making based on individual preferences. In reality, the situation is far more complex, with social norms, cultural traditions, habits and many other factors shaping our everyday consumption behaviour. Understanding consumption necessitates knowledge of sociology, psychology, anthropology and behavioural science, in order to appreciate the socio-cultural, social and psychological contexts in which consumer behaviour is embedded. These disciplines offer rich and complex explanations of human behaviour, which in turn illuminate the discussion on how consumer behaviour can be shaped into a more sustainable direction.

3.1 Personal needs/desires and social values/norms

Thinking about familiar consumption behaviours helps us to recognise that consumption is complex, not always rational (or even in our best interests) and that material possessions can be symbolic as well as functional. For example, why do people eat and drink more than is comfortable in order to celebrate Christmas? Why do people get into debt to buy luxury cars, when affordable models or public transport are available? Why do people keep their wedding dress, collect stamps or advertise brands through the clothing they wear?

⁴ See sections 3.2.1 and 3.2.2 on identity construction

In order to understand consumption we need to move beyond the dominant (economic) understanding of consumer behaviour and think about where our preferences, 'needs' and desires come from.

3.1.1 Challenging traditional thinking: a critique of the rational choice model

Traditional thinking is that consumption is driven by rational decision-making: the rational choice model suggests that individual behaviour is a process of conscious decision-making, based on assessing costs and benefits and then choosing the option with the highest expected net benefit or lowest expected net cost. It is a utilitarian model based on the concept of people acting rationally, and acting individually.

The rational choice model has so deeply dominated understanding of consumption and policy-making that it feels almost intuitive to us even though we can see from the examples above that in reality consumption behaviour is far more complicated.

“One of the reasons why rational choice theory may seem familiar is that it closely resembles and indeed draws heavily on the intellectual underpinnings of classical economics. Cost-benefit analysis, for example, is nothing more than a highly quantitative form of rational choice model” (Jackson, 2005: p. 30).

The model has been widely criticised in three main areas:

1. for assuming that choice is rational, and excluding the roles of emotions and habits,
2. for assuming that the individual is the appropriate unit of analysis, and thereby excluding the crucial role that our social situation plays in guiding our behaviour, and
3. for assuming that choices are only made in the pursuit of self-interest, and excluding the possibilities of moral and altruistic behaviour (Jackson, 2005).

The dominance of the rational choice model has led to the perception that it is our attitudes that inform our behaviour (Balderjahn, 1988; Luzar and Cosse, 1998; Ronis, Yates et al., 1989).

A large number of studies demonstrate a strong link between attitudes and behaviours in specific areas, e.g. condom use (Albarracin, Johnson et al., 2001) or recycling (Oskamp, Harrington et al., 1991). However, it has also been demonstrated that in other areas there is a clear gap between attitudes and behaviours of individuals, known as the “attitude-behaviour gap” or the “intention-behaviour gap”, e.g. (Godin, Conner et al., 2005).

“This attitude-action gap . . . means that if you challenge someone's actions, for example argue their level of car use is not sensible, they will more likely change their attitude than their action, perhaps getting defensive and saying they don't think car use is a bad thing after all rather than agreeing to drive less. This might seem incredible to campaigners but psychologists have known about it for years: it's called cognitive dissonance” (Hounsham, 2006).

It has been demonstrated that attitudes tend to have less predictive power over behaviour in cases of cognitive dissonance – situations when people attitudes and values are in conflict with one another or with incentives for behaviour. The theory of cognitive dissonance proposes that people have a motivational drive to reduce dissonance by changing their attitudes, beliefs, and behaviours, or by justifying or rationalising their attitudes, beliefs, and behaviours (Festinger, 1957). At its simplest, cognitive dissonance describes the uncomfortable tension that we feel as a result of behaving in a way that does not fit with our beliefs and attitudes. Because it is uncomfortable, the brain will try to find ways to resolve the

contradictions – and making adjustments to one’s attitude is much easier than changing one’s behaviour.

“So if you think you're a good and moral person, but you fudge a little on your taxes, you might justify this with an excuse like: 'I've overpaid in previous years' or 'the government is using my money in an immoral way,' or 'everyone else is doing it' New research shows that this is not some individual character flaw, but a strong and consistent human impulse. Brain scans show that the brain floods with pleasure when conflicting ideas are resolved” (Dessler, 2007).

Although the theory of cognitive dissonance is very well known in psychology, it is not well-known among policy-makers and researchers from other disciplines. The realisation that people’s actions sometimes contradict their stated attitudes and values is important to keep in mind when thinking about policy interventions: many have been based on the rationale of changing people’s attitudes in the hope of changing their behaviour. The problem is however, that people tend to overestimate for example their willingness to buy ecological products if compared to the actual purchases (Lindén , Moisander et al., 1998).

Attitudes are also not a good predictor of human behaviour when there are too many other influences at play or when people have addictions (Knott, Muers et al., 2007). The context in which people act is also crucial; for example, people tend to recycle more when provision of facilities makes recycling easy – regardless of their attitudes to recycling (Guagnano, Stern et al., 1995; Johansson, 1993; Thøgersen, 1990). Evidence from social psychologist Bem (1972) suggests that in some situations we deduce our attitude to something from our behaviour, for example, we know what our attitude to recycling is from observing whether we recycle or not (Jackson 2005).

Further evidence from social science shows that sometimes behaviours influence our attitudes (Knott, Muers et al., 2007), (Katz, 1960), rather than the other way around. For example, Katz’ functional theory of attitudes explains the role of attitudes in shaping social behaviour, but also identifies the possibility that behaviours shape attitudes (Katz, 1960). People form attitudes toward products, brands, advertisements, stores, themselves, and other people for four underlying reasons: utilitarian function (based on rewards and punishments), value-expressive function (consumer’s central values or self-concept), ego-defensive function (serves to protect the person from internal feelings of threat), and knowledge function (need for order, meaning, and structure). Underlying dimensions of attitude include: affect (feelings), behaviour (do), and cognitions (learning and beliefs). These dimensions can be combined into three hierarchies of effects models, which try to explain a different kind of consumer decision-making process.

- The Standard Hierarchy or High Involvement Hierarchy perceives the consumer as a rational problem solver and suggests the following order of consumer responses: cognition, affect, and behaviour (learn-feel-do).
- The Low-Involvement Hierarchy applies to low-involvement purchase situations where both motivation and risk are low e.g. trial purchases and suggests the following order of consumer responses: cognition, behaviour, and affect (learn-do-feel).
- The Experiential Hierarchy highlights the importance of consumers’ emotions (impulse purchases) and situations in which consumer are highly involved with outcome and suggests the following order of consumer responses: affect, behaviour, and cognition (feel-do-learn).

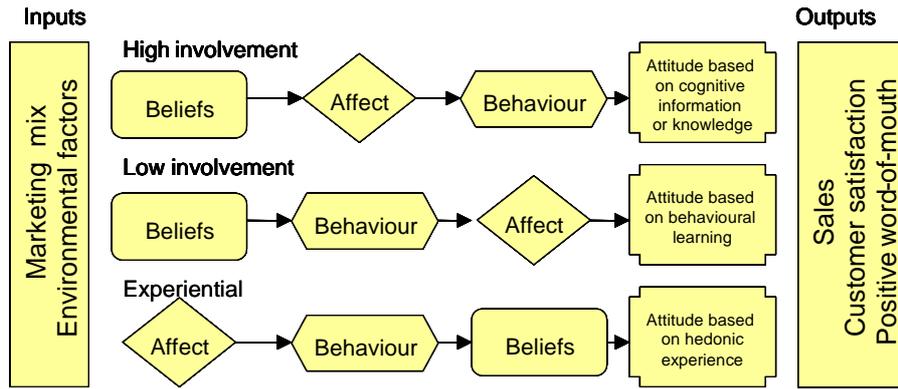


Figure 1 The hierarchy of effects models (Katz, 1960)

These models suggest that there are three ways to change attitude: via changing belief, affect or via behavioural change. This is interesting in terms of policy interventions, as it suggests that it may be possible to change some behaviours without changing attitudes, as social marketing often aims to do. However the wisdom of this approach is questioned by some, e.g. (Crompton, 2008). Changing attitudes and behaviours toward sustainable consumption is discussed in more detail in section 4.2.1.

3.1.2 Needs, wants and desires

Basic needs seem to be an obvious driver of consumption, but even the way in which physiological and social needs are met is determined by a variety of factors.

Needs theorists such as Max-Neef (1992) and Maslow (1954) conclude that actual human needs are “finite, few and universal” (Jackson, 2005), and have distinguished between material needs, such as subsistence and protection, and social/psychological needs such as self-esteem and belongingness. Maslow’s well-known “hierarchy of needs” (Figure 2) implies that self-actualisation needs will only be pursued once physiological needs have been met. However it is easy to find counter-examples, such as people who choose to starve to death rather than lose self-esteem, or who risk security for political reasons (Douglas, Gasper et al., 1998; Michaelis and Lorek, 2004). Although Maslow later reconsidered the idea of a hierarchy of needs, the categories are useful for examining the ways in which we attempt to satisfy our needs.

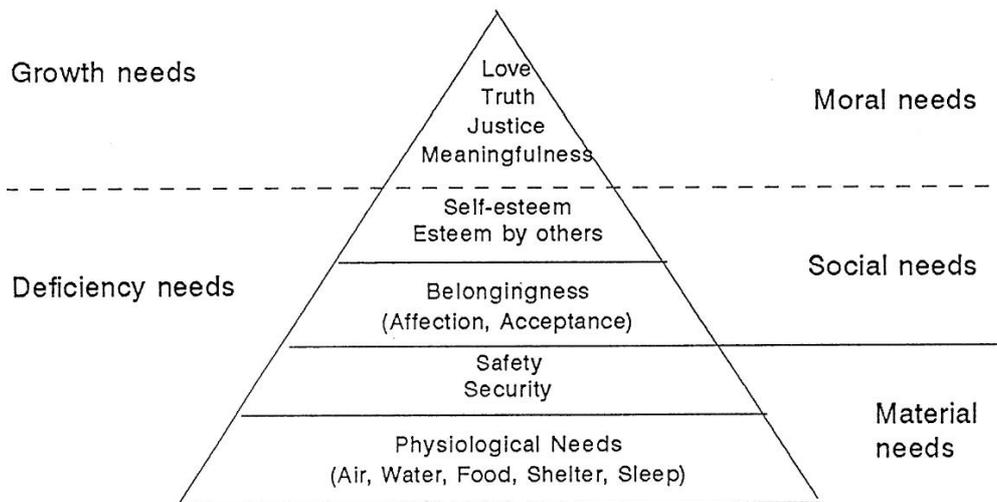


Figure 2 Maslow's hierarchy of human needs

“Our perceived consumption needs are almost always socially contingent; appropriate satisfiers depend on the social context. We can understand some needs in terms of the capabilities required to function satisfactorily in society and hence to flourish” (Sen, 1993).

Needs may be perceived as insatiable or satiable (Max-Neef, 1991). Whether needs are insatiable or not, to some degree depends on their nature: absolute needs are felt by an individual independently from the surrounding environment, while relative needs arise from comparison with other people (Howarth, 1996).

As pointed out by Douglas (2003) the forms of fulfilment or satisfiers of needs differ across cultures, and may be material or immaterial. Satisfiers may include clothing, mobility, education and much else (Michaelis and Lorek, 2004: p. 63). For example, the physiological need for subsistence is met through consumption of food: levels and patterns of food consumption vary greatly within and between countries; obesity and diet-related illnesses are increasingly common, as people consume more food than they need, and consume food types that are unhealthy. Similarly, our need for security could be met through social and community mechanisms, but is more often met through home security systems, alarms etc. (Segal, 2003). Our social needs are catered to with online friendship and dating groups, special interest holidays, the greeting cards industry etc. Our need for sleep is met through consumption of equipment including duvets, sleeping bags, luxury mattresses etc.

There is great debate between academic disciplines about the idea of human needs:

“Cultural theorists and sociologists in particular tend to be fiercely sceptical of the whole discourse of needs, arguing that it is naïve, rhetorical and moralistic. Nonetheless, the language of needs retains a popular appeal and an obvious resonance with the discourse of sustainable development” (Jackson, 2005: p. 11).

The link between perceived needs and consumption levels is complex: the ways in which we choose to satisfy our needs and wants are influenced by cultural and institutional factors, and do not always contribute to our overall well-being – consumption of junk food or alcohol are examples. The obvious explanation is the role of advertising and marketing in creating “false needs” (Fromm, 1976; Jackson, 2005), although there are many other social and psychological drivers of consumption, which the following sections aim to explain.

The advertising industry plays a key role in continually creating new “needs” to ensure that we keep on buying new products; according to advertising experts Belch and Belch, the stages in the consumer decision-making process are: problem recognition – information search – alternative evaluation – purchase decision – post-purchase evaluation (Belch and Belch, 2007: p. 107).

The first stage, problem recognition, means that the consumer recognises a “need” or want and is motivated to act upon it – this means that there is now a gap between their ideal state and their actual state, although this may be perceived as a goal rather than a problem. Such “problem” states might be induced by running out of a product, or becoming dissatisfied with something we already own and wanting something new to replace it. Problems can also be the result of a new need, for example changing jobs may require you to buy a suit to wear. Buying a product can also result in problem recognition:

“For example, the purchase of a new iPod may lead to the recognition of a need for accessories, such as a dock, attachment for the car, or a carrying case” (Belch and Belch, 2007: p. 108)

“Marketer-induced problem recognition” refers to the techniques used by marketers to encourage dissatisfaction in consumers. For example, adverts for personal hygiene products such as mouthwash and foot sprays may be designed to create insecurities that marketers believe they can solve by buying the products; marketers ensure fashions change quickly and create perceptions among consumers that their wardrobes are out of date (Belch and Belch, 2007: p. 108).

When marketers have a new product to sell they need to create new “problems” that their products solve, so creating new “needs” for the consumer.

“Marketers’ attempts to create problem recognition among consumers are not always successful. Consumers may not see a problem or need for the product the marketer is selling. A main reason many consumers were initially reluctant to purchase personal computers was that they failed to see what problems owning one would solve. One way PC manufacturers successfully activated problem recognition was by stressing how a computer helps children improve their academic skills and do better in school” (Belch and Belch, 2007: p. 108).

Ethnographic research confirms the commonly held belief that we are led more by our desires than by our actual needs; this is often used in marketing campaigns, based on the idea that we respond more strongly to desire (including sexual desire) than to rational ideas (Jackson, 2005).

“But this association of objects with sexual desire is not . . . an arbitrary or artificial device dreamed up by marketers out of nowhere. If it were, it would be highly unlikely to succeed. What advertising attempts to exploit is a very real and rather widespread association of material commodities with sexual and social status” (Jackson, 2005: p. 12).

3.1.3 Values and norms

Consumption and the factors that shape it cannot be understood without considering the cultural context within which consumption processes take place. Culture, being the collective memory of society, is the prism through which people perceive products and make sense of their own and other people’s consumer behaviour. Culture is a common denominator for this continuous process of sense-making and it comprises shared meanings, values, norms and rituals, traditions and customs. Culture can also be seen as an interpretation system or a decoding mechanism that helps people translate the daily practices and behaviours of others and understand their explicit or implicit meanings (Solomon, Bamossy et al., 2006). Shared meanings travel from the culturally constituted world to consumer goods with the help of the marketing industry, and then from consumer goods to individual consumers (McCracken, 1986).

Culture comprises both intangible ideas, such as values, more tangible and embedded practices, such as habits, as well as material products, both sacred, e.g. religious artefacts, and mundane, e.g. cars, TVs, clothes, etc. The relationship between culture and consumption is that of a dialogue. On the one hand, the spectrum of products on the shelves is a clear demonstration of the dominant cultural ideals of a specific period of time. For example, frozen food and convenience meals reflect the hurried modern times and changes in demographic structure of societies – family composition and the active participation of women in the labour market; unisex clothes point to the blurring gender boundaries, while eco-cars indicate increasing consumer awareness of environmental problems.

One important constituent of culture is values. Values can be defined as a belief about some desirable end-state that transcends specific situations and guides selection behaviour (Schwartz and Bilsky, 1987). For social psychologists, values represent a higher-level concept that structures attitudes. Values differ between cultures, but within cultures there is usually a set of underlying values that are shared by the members of this particular society. Thus each society has a set of core values (Pollay, 1983). There is debate between different academic perspectives on the nature of values, as well as the role they play in shaping consumption. For example, some suggest that individuals can hold multiple values at one time, with different values being emphasised in different contexts, such as work or home environments (Biel, 2004; Stern, Dietz et al., 1993).

Research from social psychology suggests that values are important for consumer behaviour since we buy products and services because they help us fulfil a certain value-laden goal. For example two people may have similar behaviour, e.g. vegetarianism, but their underlying values might be very different, e.g. healthy lifestyle or animal rights. Values are also understood to influence specific attitudes, for example someone who cares greatly about security will be more likely to support governmental policies to reduce crime rates, even if this entails some erosion of civil liberties (Crompton and Kasser, 2009).

Dominant societal values shape the development of social norms, which are informal rules guiding our lives by outlining what is socially acceptable and not-acceptable. “Social norms are rules and standards that are understood by members of a group, and that guide and/or constrain social behaviour without the force of laws” (Cialdini and Trost, 1998: p. 152). Social norms become apparent especially in situations when one’s behaviour deviates from what is accepted as “normal” and when it negatively affects others (Coleman, 1990). Social norms are also seen as working as barriers to egoistic individual impulses in favour of collective good (Biel, Eek et al., 1999). Violation of social norms is followed by sanctions, either at the individual level – when personal norms (Schwartz, 1977) are violated – in the form of guilt, or at the level of the social group (Kerr, 1995) by using such measures as reprimand, social judgement or ostracism. Neuroscientists have found that such social rejection activates the same part of the brain as physical pain: we are extremely sensitive to the threat of social ostracism and our brains send clear signals to avoid it (Lieberman and Eisenberg, 2005), possibly because in prehistoric times being excluded from the tribe would have meant a life of extreme risk and danger (Naish, 2008).

In recent decades we are witnessing how norms of high levels of consumption and materialism are being legitimised in contemporary societies across the globe. Advertising (and to some extent media) generally promote just two models of a “good life” – both of them relying on possessing enough money to make them possible (Grayling, 2008). One is the life of fashion, partying, shopping, celebrities and status from wealth and displaying ownership of branded goods. The other is depicted as having enough money to “opt out” of the “rat race”, and live a quieter, but still very comfortable life. There are *“a thousand clichés available to remind us that money and possessions do not yield more than temporary happiness, that true wealth lies in such intangibles as health and love, and so on: yet . . . the shops are full of people buying, and glossy magazines and television advertisements continue to purvey their glamorous theories about the marks of social and personal success”* (Simms and Smith, 2008: p. 74).

Materially intensive consumption patterns have come to symbolise a high standard of living (even though well-being is not automatically increased as material standards improve beyond basic levels). On the other hand, the Eurobarometer survey in EU27 showed that together with increasing levels of material consumption and growing materialistic values in Europe, other aspirations and norms are becoming important than purely material aspirations, e.g. health,

love, work, peace and money (European Commission, 2008b). In economically advanced countries there is a growing awareness among the population about the health and environmental impacts of products, resulting in growing demand for organic and local food. In some countries a small, but growing percent of the affluent population reveals post-materialistic values and is searching for ways to break free from the adverse consequences of the consumer economies: increasing pace of life, stress created by the treadmill of “work and spend” cycle, overflow of information and abundance of commodities, and lack of time to actually enjoy life.

The next sections explore the symbolic and other meanings that consumption denotes for individuals and societies.

3.2 Different meanings of consumption for people

People purchase goods and services for their qualities and functions, or because they enable certain practices people are engaged in, or for their symbolic or identity value (Bauman, 1990b). Four different types of meanings associated with products can be distinguished: *utilitarian* meaning (perceived usefulness of a product in its ability to perform functional tasks), *hedonic* meaning (specific feelings the products evoke or facilitate), *sacred* products that are very important to people, and *social* meanings (products and services are seen as “media for interpersonal communication” and for statements about people’s positions and statuses in social groups) (Engel, Blackwell et al., 1995). Some authors indicate that for many consumers today, the symbolic value of products has become even more important than the physical aspects of goods (Leiss, 1983).

3.2.1 Symbolism and personal identity

The role of goods in defining identity has been widely studied since the 1800s, and is generally believed to be one of the most important drivers of consumption behaviour (Jackson, 2005).

Besides having a utility value for consumers, many products also help us create the social world and find a credible place in it (Douglas, 1976: p. 207). The research on symbolic role of products reveals that it is not just the material function of goods that is important for consumers, but also what “things” signify about us and our lives – both to ourselves and others. Some products have hedonic meanings to us - obvious examples are wedding rings, sports cars that can rarely be driven at their maximum speed and clothes showing allegiance to football clubs. We buy them because they make us feel good, they excite us, or because they help us remember meaningful moments, and to symbolise our commitments or other aspects of our personalities. Other products have sacred meanings to us, including personal memorabilia, such as family photos, or religious artefacts that form or remind us about who we are or where we come from.

As we are not born with a fixed identity, individuals have a strong desire to create and confirm a personal style and in this way manifest one’s identity. The Western trend towards individualisation implies that people are freed from social and traditional bonds, meaning that their identities are no longer defined by a community or traditional roles; instead this may be partially replaced by increasing the number of owned goods, which serve as a message about their identity (Halkier, 1998). Although an individualisation trend is apparent in contemporary societies, some scholars suggest that people’s pursuit of the same brands and lifestyles substitutes for a lost sense of community (Hacker, 1967). Traditional communities are being substituted by newly formed virtual societies, consumer clubs, brand name societies, etc.

3.2.2 Consumption and social conversations: conformity and differentiation

Consumers are seen as being embedded into, influenced and enabled by institutions (North, 1981), (Hodgson, 1988). Leibenstein (1950) suggested more than half a century ago that since the desire of people to consume certain goods is rooted in the desire to be accepted by a social group, people can be trapped by the desire to adopt to the most accepted or prestigious ways of living.

Our behaviour is greatly influenced by the lifestyles of those around us: friends, family, colleagues, and by the lifestyles (both real and fictional) portrayed on television and in the media. In fact material goods have been described by Schor (1999b: p. 34) as “a kind of pseudo-language of social communication”, which can be “read” by observers in a process of “decoding”.

In addition to constructing individual identity, people are social beings and continuously construct and re-construct their collective identities. This a paradox: people feel a strong need to fit in with their social groups and avoid rejection – in material terms this is often referred to as “keeping up with the Jones’s”, but we also strive to differentiate ourselves; to highlight our status within the social group. So, goods can be used both as means of interacting with society and the world at large, as well as for making a personal differentiation in society (Douglas, 2003).

The need to conform and belong to a social group has been named normative consumption, as a person has to accept the code of conduct expressed both in tangible and intangible terms by the group. For example, participation in “*social groups may require particular standards of dress, and reciprocity in treating others to restaurant meals. When it is clear that the alternative to belongingness is to be socially excluded, this kind of consumption appears less a luxury and more a necessity*” (Michaelis and Lorek, 2004: p.65).

Baudrillard (1998) noticed that while people need to buy the same items because they want to belong to a certain stereotypic group, they also want to buy goods that allow them to feel different and unique. A partial explanation of this apparent conflict of desires is provided by Bourdieu who realised that symbolic goods used in the process of stratification should be the “attributes of excellence” (Bourdieu, 1984: p. 66) – they must represent a superior class or a social group, at least in the eyes of the beholder. The attribute of excellence can also be defined in terms of the product novelty: there is always a group of innovators who seek newness and are ready to pay a high price for having the possibility to distinguish themselves from the rest who cannot afford the innovation (Rogers, 1995).

Maintaining membership and achieving a certain status in a social group stimulates consumption of so-called “status goods” leading to conspicuous consumption (Veblen, 1902). These kinds of goods have also been named “positional goods” by (Hirsch, 1977), who defined them as goods of which the value depends on the value of goods owned by others. These goods help mark the distinction between different social groups and classes and strengthen one’s identity within the group (see section 3.3.1). Schor defines this type of consumption as “competitive consumption” since it is driven by the competition for social status among consumers (Schor, 1999a). She posits that in modern societies the definition of the reference group – with which comparison is being made or in which competition has been initialised – has changed, partly due to the increasing exposure to all social classes from television and other media: while before households of similar incomes were competing among themselves, nowadays people of lower classes aspire to luxurious lifestyles of people from upper middle and high classes.

Early adopters of new luxury goods or technological innovations can be compared with the bourgeoisie class in Bourdieu's explanation (see section 3.3.1). As Hirsch described it from the sociological perspective: "Positional goods come first into the hands of the early rich, at a time when the income of others remains absorbed by their still unsatiated demand for material goods" (Hirsch, 1977: p. 36).

As time passes the innovative product becomes a mainstream product with masses of consumers being able to afford it (for the mechanism see section 2.2.1), and thus the product loses its positional value. Instead mainstream consumers are buying the products at least in part, not to be excluded from the group. A similar mechanism in the social sphere has been observed by Parkin (1979), who described how the lower classes continuously struggle to appropriate resources and opportunities of the bourgeoisie that continuously invents new ways of distinguishing itself from them. An interesting observation has been made by Scitovsky (1992) that people get used to a certain level of material welfare and with time this level no longer contributes to increased subjective well-being. On the other hand, it is rather the loss of the obtained level that is feared. Supporting this idea, Kahneman, Diener et al. (1999) state that "*people adapt to improving circumstances to the point of affective neutrality,*" where improvements in circumstances "*yield no real benefits*" (Kahneman, Diener et al., 1999: p. 13).

This urgent desire to own the material goods that will bring social acceptance as described by Jackson (2009) as "A Life Without Shame": Jackson builds on the work of Adam Smith in *The Wealth of Nations*, who gives the example that while ownership of a linen shirt cannot be classed as one of life's necessities, a respectable worker of those times would be ashamed to go out in public without one, as this would imply "*that disgraceful degree of poverty which, it is presumed nobody can well fall into without extreme bad conduct*" (Smith, 1776, reprinted 1937: p. 821). Jackson takes the title "a life without shame" from the work of Amartya Sen, who suggested more recently that the material requirements for a good life, or social psychological flourishing, vary between societies, depending on the existing set of consumption expectations, such as transport, access to information from televisions, clothing, ability to afford particular types of socialising etc (Sen 1998:298). Jackson notes that if we do nothing to challenge the importance of material goods in our social functioning, the demand for material consumption will continue to increase, as people avoid shame by aspiring to the latest level of commodity ownership (Jackson 2009).

This process of increasing societal expectations is reinforced by developments in infrastructure, which facilitate particular patterns of consumption and can help to determine which behaviours are easy or difficult (see section 2.2.2).

"When new products and living standards are normalised, not only expectations are formed, but simultaneously, the new standards are built into the social and material structures of society and sometimes even take on the character of constraints. A car-based society with widespread suburban settlements and undeveloped public transport turns the car into a necessity or at least a commodity that requires much dedication to forgo: compulsion becomes the other side of the coin of freedom" (Røpke, 2009a: p. 4).

In this way consumption of goods and services that may once have been luxurious or aspirational starts to become ordinary, necessary and possibly habitual.

3.2.3 Ordinary consumption and habits

"We are captured by pressures to standardise our behaviour arising from the need to succeed in the job market, to behave in ways that are consistent with others' expectations. Once we accept a normal role in society – parent, employee, participant

in social and civic activities – a great deal of ‘ordinary’ consumption becomes almost inevitable. ... These pressures go a long way to explaining the apparent increase in citizens’ “need” to consume” (Segal, 1998).

A big part of our everyday consumption is inconspicuous or ordinary, not linked to status-seeking (Gronow and Warde, 2001), for example rent or mortgage payments, utility bills, tax etc., as well as mundane everyday purchases such as lunch, stamps etc. These consumption “...actions require little reflection, ... communicate few social messages, ... play no role in distinction, do not excite much passion or emotion” (Gronow and Warde, 2001: p. 3). Ordinary consumption is about purchases of everyday items in a repetitive manner (bread or toothpaste) and about patterns of appropriation and use rather than specific purchasing decisions, for example consumption of water or energy. It is also about contextual constraints of consumption practices and patterns, e.g. reduced number of local specialised shops and proliferation of shopping malls. Ordinary, or as it is also called inconspicuous consumption, gives more attention to collective identity than to issues of personal identity, which is more characteristic for studies of conspicuous consumption.

“To take one simple and relevant example, the fuel consumption associated with heating our home is determined (among other things) by the available fuel supply, the efficiency of the conversion devices, the effectiveness of thermal insulation in the dwelling and the level of thermal comfort programmed into our thermostats. These factors in their turn are constrained by the historical development of the fuel supply and appliance industries, the institutional design of the energy services market, the social norms associated with personal convenience and thermal comfort, and our own individual responses to those norms. The evolution of social and institutional norms is itself complex, often involving incremental changes over long historical periods. Typically, at the point of everyday decision, the ordinary consumer will have little or no control over much of this decision architecture” (Jackson, 2006a: p. 112).

In many cases, everyday consumption practices are deeply routinised and the decisions about familiar daily situations are made automatically, as a matter of habit. Life would be impossibly complex if we were to go through the entire decision-making process every time we are faced with a simple, everyday choice. According to psychological learning theory, habits are formed in the process of continuous reinforcement of influencing factors. Once people are satisfied with their choice and situation, their behaviour becomes routinised and they do not tend to search for new solutions, until new signals and influences come that can trigger the search for better alternative. Once we have identified a certain product and brand that suits us, we do not look for an alternative, because it is linked to transaction costs in terms of time, trials and errors. For example, the average supermarket has some 40 000 individual products or brands on display (Ries and Trout, 2000). Choosing products that satisfy our needs and wants may therefore become a strenuous task⁵ and therefore habits guide us through this maze of products. This is one reason why habits can be difficult to change.

So we have seen that even the more conspicuous types of consumption can be linked to the social norms that surround us, and that as high levels of consumption become normalised, infrastructures develop that perpetuate the consumption patterns further. The following section takes this idea further; practice theory investigates the ways in which the various structures of society combine to ‘normalise’ certain patterns and levels of consumption.

⁵ More about the paradox of choice, when too much choice leads to lock-in effects, can be found in (Schwartz, 2004)

3.2.4 Consumption as an integral aspect of normal practices

The normal, accepted practices of everyday life that people engage in – cooking, raising children, playing sports, watching TV – all have social and personal meaning, as well as patterns of consumption, associated with them. For example, raising children involves providing healthy food and a good education, offering enjoyable experiences, encouraging them to conform to social norms, etc. – being an accepted part of society requires us to take part in these standard practices, such as being a “good parent” (Randles and Warde, 2006). These “practices” usually involve some material consumption e.g. equipment, materials, and infrastructures: people want to consume partly in order to take part in the normal practices of their society. Thus consumption can be “*understood as the appropriation of goods and services in the course of engaging in social practices*” (McMeekin and Southerton, 2007).

“Consumption is motivated by all the best reasons – taking care of children and the elderly, cultivating the relationship to one’s partner and friends, keeping fit and developing one’s skills, to mention a few examples” (Røpke, 2009a: p. 5).

Practice theory acknowledges the powerful role of advertising and status-seeking behaviour, as well as the role of consumption in identity formation, “*because people are not born with an identity in modern societies and thus have to work hard to shape their identity and get it acknowledged by others*” (Røpke, 2009a: p.5). However, practice theory is useful in showing how these sociological drivers are just part of a more complex web of drivers that shape “normal” consumption patterns and levels; these include market economic competition, technological change, advertising, credit / deferred payment, commercialisation of public space, normalisation of luxury goods, public discourse, development of infrastructure and many others (some of which were explored in earlier chapters). In particular, practice theory attempts to move beyond the traditional ways of thinking about consumption – either that the social system and structures largely determine the actions of individuals, or that society is the sum of individuals acting independently. The concept of practices as bridging this theoretical divide is found for example in Giddens’ theory of structuration:

“The basic domain of study of the social sciences, according to the theory of structuration, is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time” (Giddens, 1984: p. 2).

Practices are said to be clusters of activities that are performed by large numbers of people, rather than something that just a few people do – the typical ways of doing and talking about things form a shared understanding, which involves rules, principles, instructions, emotions etc. The practice may involve physical actions, mental actions and skills, material goods and infrastructures – and these material elements are just as integral to the way we do things as the social elements: they come together as a “block”.

It is argued that these practices are the way in which we think about our everyday life, and that our reputations and self-respect depend on being seen as competent practitioners (Randles and Warde, 2006: p. 228). This challenges the idea that people are motivated by consumption itself, and instead suggests that our consumption “wants” are linked to the practices we want to engage in and the things we want to achieve.

Practice theory reminds us that consumption is not only about shopping; consumption might include leisure activities, receiving gifts, public provision, domestic production etc. In this way, practice theory is useful in showing a different dimension of consumption: that it is often about “doing” as well as “having”, and about using products as well as displaying them (Røpke, 2009b: p. 11).

Perhaps the greatest advantage of the practice approach in analysing consumption is that it avoids moralizing on specific behaviours, because it shows consumption as embedded in practices which are “*carried out for all the best reasons, and people have a legitimate interest in being competent practitioners*” (Røpke, 2009b: p. 13). For consumption patterns which are unsustainable, practice theory recognises the real challenges that are faced when society needs to move to replacement practices or altered practices. In addition, the continual rise of “normal” standards (such as daily showers, personal computers and televisions even for children, higher levels of air conditioning) can remind us that practices are not natural, but are the result of the system we take part in:

“The fact that most consumers consider spatial mobility or a holiday trip as important contributions to the enjoyment of their lives is not a law of nature, but a cultural phenomenon” (Cogoy, 1999: p. 387).

3.3 Different groups of people and their consumption

Organisational psychology suggests that in social groups, individuals adopt social roles that are prescribed, assigned or expected of them. Therefore more and more studies focus on consumption as a collective and shared process and consider contexts and conditions within which it takes place, e.g. (Georg, 1999). One of the possibilities to study collective processes is by investigating different groups that people form as members of the society. Constellations of specific interest for consumption are social classes, people living different lifestyles and different demographic segments of consumers.

3.3.1 Social classes and consumption

Social class refers to the hierarchical distinctions between individuals or groups in society. Typically individuals comprise a certain class based on their economic positions, including education and occupation, and similar political and cultural interests. People also tend to emphasise their position of power in a society and to signal it to other classes by adopting distinctive lifestyles. In order to further rank themselves within their class, people tend to adopt various styles, which include the type of clothes they wear, the manners and language they use, the political standing and cultural refinement they demonstrate. Therefore, one of the positions regarding consumption is that social classes in society exhibit different lifestyles and consumption patterns that reflect their social standing (Bourdieu, 1984).

Despite the criticism that social class is no longer a useful concept for understanding consumption patterns, empirical studies demonstrate that social class still matters due to income differences associated with class (Marshall, 1997) or because people tend to raise their children within the same class and are inclined to recruit employees from within their social class (Breen and Rottman, 1995; Erikson and Goldthorpe, 1992). Two fundamental theories of modern class segmentation - Bourdieu’s “reproduction theory” and Giddens’ “class structuration thesis” - are considered below, as well as the relatively recent “class convergence theory”.

Bourdieu’s “theory of social reproduction”

By synthesising Marx, Weber and Durkheim, Bourdieu offered a theory of social reproduction (Bourdieu and Passeron, 1990/1970) - a transmission of cultural values and norms from generation to generation. According to Bourdieu, consumption is a tool for class reproduction. In this theory class is not defined in terms of means of production, but in terms of social relationships. In his seminal work “Distinction: a social critique of the judgment of taste” Bourdieu distinguishes three social classes: the bourgeoisie, petit bourgeoisie and the working class. He describes how upper classes exclude lower classes in the labour market and

the marriage market by regarding their own tastes as superior (Bourdieu, 1984). Society incorporates “*symbolic goods, [...as] the ideal weapon in strategies of distinction*” (Bourdieu, 1984: p. 66). The excluded classes strive to appropriate the resources and opportunities of the excluders (Parkin, 1979). Class fractions are determined by a combination of the varying degrees of social, economic, and cultural capital (Bourdieu, 1986), where capital is understood as “*the set of actually usable resources and powers*”. *Economic capital* includes economic resources one has in disposal, including both cash and capital or other assets. *Cultural capital* is the knowledge and experience people develop and acquire in the course of their life that enables them to reach a higher social status and to succeed better than people from a less prominent background. *Social capital* is defined as resources created and obtained through the social networks people create during their life that support them and help them exert influence in society. Each class has its own identity, values and lifestyle, or as Bourdieu puts it “values, tastes and preferences” (Bourdieu, 1984). These preferences have influence on consumption choices, social networks, attitudes towards health, use of language, access to education and choice of occupation. Differences in class are then explained by different degrees of “distance from necessity” (Bourdieu, 1984: p. 53-56).

Class analysis has been criticised for no longer being a useful concept for understanding contemporary social phenomena in Western countries (Pakulsky and Waters, 1996) and consequently for understanding consumption (Bocock, 1992; Crompton, 1996). It has been suggested that in the era of mass consumption lifestyles are becoming more and more diverse and therefore the link between social class and consumption should be slowly disappearing as people are more and more inclined to choose lifestyles that are no longer associated with classical social standings (Beck, 1992; Lash and Urry, 1994).

Giddens’ “class structuration thesis”

Another important contribution to understanding societal structure comes from the work of Giddens “The Class Structure of Advanced Societies” (1984). In this work based on Marx and Weber, Giddens suggests that three social elements - property, education or professional skills, and manual labour – shape the three level model of class structure. The upper class owns and controls productive property; the members of the middle class do not own property, but create a power position in the social ladder through education and professional skills, which they can sell on the market, while the members of the working class can only offer manual labour on the market and receive subsistence salaries. Giddens however acknowledges the rigidity of such a structure and submits to the proposition that in modern societies class structures and boundaries are very fluid and members of society can exhibit partial access to all the three elements that originally shape the class structure - property, education or professional skills, and manual labour.

In Giddens’ theory there is always the social group dimension to domestic consumption, but also a dualism of *micro-level* of private (domestic) consumption behaviour and *macro-level* of institutional developments in consumption. Giddens also introduces an idea of “*distributive groupings*” - the interactions between social groups that unite due to common lifestyle or consumption patterns. He illustrates this idea by consumption patterns of buying a house and by the functioning of the class structures that follow this decision: in many modern societies upper, middle and lower classes live in distinct areas that do not overlap or that are even protected by walls, e.g. gated communities in the USA and Saudi Arabia.

Class convergence theory

The main proposition of the class convergence theory is that social classes are becoming more like each other, especially as living standards are rising and increasing number of people have access to previously luxury goods and services (Schmidt, 1996). Some also call this trend

class reconfiguration – resulting in the emergence of “new class” and “new social movements” (Eyerman, 1992). One consequence of this change is the shift from class-based politics to identity politics or to a new politics of material abundance and from ideology to lifestyles. Proponents of this position argue that consumption patterns are becoming more and more important for shaping identity and even more important than earning the income (Clarke and Saunders, 1991).

Social class and consumption patterns

The aforementioned theories discuss the relative role of class for consumption. One of the main effects of a social class is income inequality, although it is not necessarily a causal factor. Studies consistently demonstrate that members of higher class have higher income levels than those in lower classes. This inequality is also reflected in occupation and working conditions depending on class. Upper and middle classes enjoy greater freedoms in their occupations, while lower classes have to worry about health hazards and injuries (Kerbo, 1996). Studies also show that despite the growing individualisation trend in society, the occupational class effect remains a very powerful variable with respect to consumption patterns and chosen lifestyles (Tomlinson, 1998). Class structure is rather different in European countries and it can be used for explaining differences in consumption patterns. For example, a study of Croatian society demonstrated that social class compared to income has a greater influence over consumption of many products (Mihic and Culina, 2006). Income, however, better explains buying habits for relatively expensive products, e.g. insurance policies and alcoholic drinks, or services, such as restaurant visits. This is explained in the study by a specific structure of Croatian society, where social class is mostly defined by the level of income. Social class and income have a similar influence over the purchasing decisions regarding skiing trips or summer vacations.

Sweden is another interesting example of a very different class structure, being one of the most egalitarian European countries in terms of distribution of disposable income (Atkinson, Rainwater et al., 1995: pp. 39-58). In Sweden workers are becoming part of the large middle class due to the increasing wealth. This development has implications for consumption patterns in that due to a low degree of income difference, upper class creates distinction by investing more into cultural consumption (Toivonen, 1992: p. 299).

Further discussion on the relevance of classes and other groups of society for the environment and sustainable consumption can be found in section 4.2.2.

3.3.2 Lifestyle and socio-psychological groups

Lifestyles are a way we live our lives that allows us to fulfil our needs and aspirations. They also serve as “social conversations”, in which people signal their social position and psychological aspirations to others. Since many of the signals are mediated by goods, lifestyles are closely linked to material and resource flows in the society. Lifestyles are based on past and current consumption and production patterns and are intricately interwoven with everyday choices of people. The importance of lifestyles in post-traditional societies is increasing, compared to the social class structure (Giddens, 1991). According to Slater,

“...lifestyle is different from the traditional status orders it replaces and from modern structural divisions (such as class, gender and ethnicity) in at least two crucial respects. Firstly, lifestyle tends to indicate a purely “cultural” pattern: it is made of signs, representations, media and is as mutable and unstable as they are. Secondly, one can in theory switch from one shop-window, TV channel, supermarket shelf and so on to another. The instability of the modern self is thus partly understood as an aspect of the instability of modern forms of social membership”. Slater, (1997: p. 87):

Lifestyle consists of patterns, in which people live and spend time and money (Engel, Blackwell et al., 1995: p. 449). They reflect people’s activities, interests and opinions and are used for interpreting life around them. While values are more enduring, lifestyles change rather rapidly. The construct of lifestyles constantly transforms, following changes in the environment, making sure that it is consistent with individual’s values and personality.

Lifestyle segmentations are widely used in different applications, including products and marketing campaigns, in research and in policy. Below several examples of such segmentations are presented. The role of lifestyle segmentation for the environment and sustainable consumption is discussed in section 4.2.2.

Lifestyle segmentation: activities, interests and opinions (AIOs)

Lifestyle segmentation was first introduced in 1970s. It was a new way of segmenting people that went well beyond the classical market segmentation by demographic parameters, such as age, income or occupation. Together with demographic parameters the lifestyle segmentation included such parameters as activities, interests and opinions (AIOs) (Wells and Tigert, 1965). Thus, lifestyle was measured according to consumers’ interests and opinions and how they spend their time, as well as by demographic factors (see Table 1). Plummer (1974: p. 34) listed a number of factors constituting four dimensions of lifestyle.

Table 1 Lifestyle dimensions (Plummer, 1974)

| Activities | Interests | Opinions | Demographics |
|-------------------|------------------|-----------------|---------------------|
| Work | Family | Themselves | Age |
| Hobbies | Home | Social issues | Education |
| Social events | Job | Politics | Income |
| Vacation | Community | Business | Occupations |
| Entertainment | Recreation | Economics | Family size |
| Club membership | Fashion | Education | Dwelling |
| Community | Food | Products | Geography |
| Shopping | Media | Future | City size |
| Sports | Achievements | Culture | Stage in life cycle |

To segment people into different lifestyle categories, they are asked various questions about their way of living and respondents should indicate how much they agree with the statements. Lifestyle profile is then created based on how people spend their time, what they find important and how they view themselves and the world around them. Different segmentation typologies are developed by different organisations, most often by consultancy companies working with market research. They usually divide population into 5-10 distinct segments, each having a certain name and a description of people constituting it.

There is no one standardised lifestyle segmentation model. Segmentations models are being continuously developed by marketing research companies and advertising agencies. The different lifestyle segments can be used to understand attitudes of different segments towards specific products and services or activities and strategies, e.g. information campaigns or taxes and prices. Below several examples of such segmentation according to different criteria are presented.

Lifestyle segmentation: VALS

Values and lifestyles (VALS) segmentation system was developed in 1970 for American market and was upgraded later to VALS2 to reflect demographic changes in the society. VALS was developed by dividing the market on the basis of personality, values and lifestyle, while the current VALS2 system is based on psychological traits instead of social values.

The VALS system divides American population into eight segments, roughly equal in size. Each segment has a unique combination of psychological attributes and demographics (income, education, eagerness to buy) that underlie consumer decision making. Each segment has a distinct consumer mind-set and exhibits distinct patterns of consumer behaviour. The segments are then distinguished along two axes: resources and self-actualisation (Solomon, Bamossy et al., 2006: p. 570).

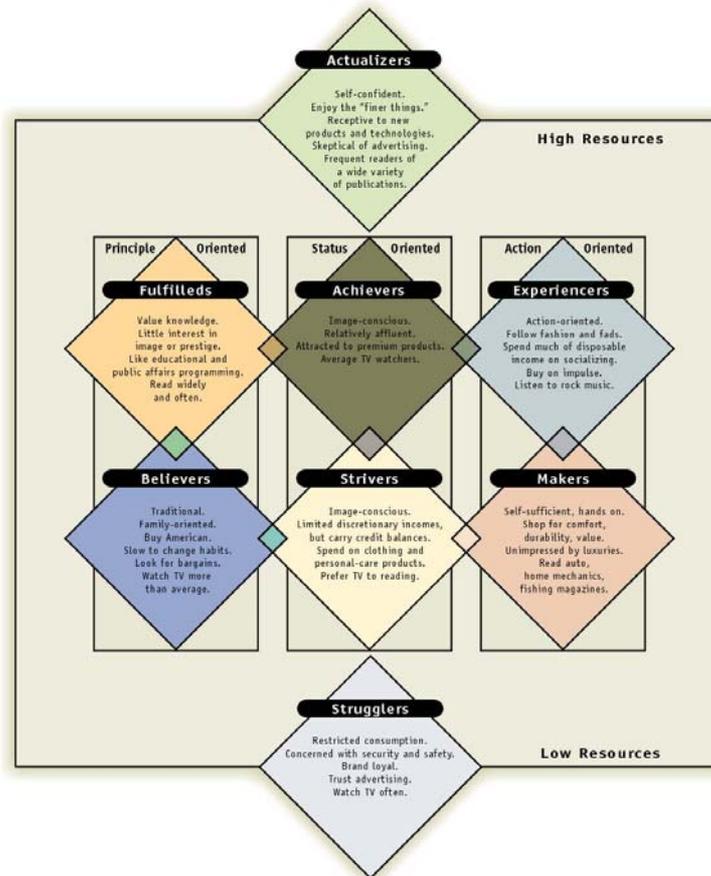


Figure 3 VALS 2 lifestyle segmentation (Solomon, Bamossy et al., 2006: p. 570).

Actualizers are at the top of the VALS 2 scale. They are active people who are used to being in charge; they typically have high self-esteem, abundant income and education. They typically have developed tastes for finer things in life.

Two groups of people that make their purchasing choices on strong set of values are: *fulfilleds* - mature, conservative, and well-educated; *believers* - conservative, relatively successful and have close ties with church and community.

Other two groups make their purchasing choices based on status function: *achievers* - career-oriented people who prefer prestige products of well-established brands; and *strivers* - less successful people who still prefer stylish products and good brands.

Experiencers comprise young, impulsive people enjoying risky experiences; *makers* are action-oriented people who prefer being self-sufficient and therefore they are the ones

working with their cars, in their gardens and they are generally not interested in prestige products.

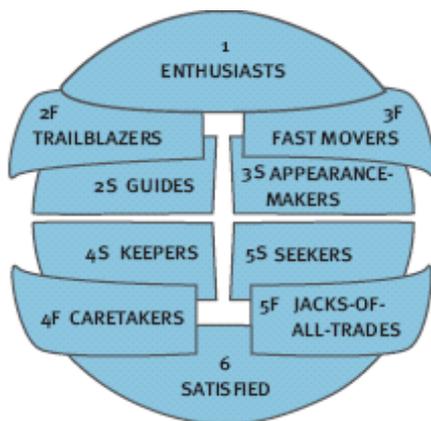
At the bottom of the scale are *strugglers* who are often low-income people concerned with making the ends meet, they are usually cautious, but brand-loyal consumers.

A major contribution of VALS is to provide an understanding of consumers that goes beyond demographics (age, income, education, gender, and so forth) by including the key psychological attributes that motivate consumer behaviour. This contribution is critical, because VALS demonstrates that consumers with the same demographics often have different motivations. This fact typically plays out in one of the two ways: people with the same demographics engage in different consumer behaviours, or people with the same demographics engage in the same behaviours for different reasons.

A German study “My life” used the VALS typology for mapping European lifestyles along the axes of materialism – spiritualism and dynamic – reactive (Reynolds, 1994) cited in (Schmidt, 1996). Schmidt and Pioch however acknowledge that psychographic analyses can rarely rely on existing databases of data and are thus typically used by commercial agencies rather than public organisations (Schmidt and Pioch, 1994).

Lifestyle segmentation based on attitudes and values

RISC Monitor (Research Institute on Social Change) has since 1978 conducted international surveys of lifestyles examining the attitudes and values of the population and outlining socio-



cultural changes in more than 40 countries. By collecting information through interviews and questionnaires, it measures values and attitudes and their changes, how people relate to society and consumerism, and media usage (United Magazines Ltd., 2005). Based on the answers, respondent scores are allocated in a space defined by three axes that represent the most distinguished dimensions in the data: exploration/stability, social/individual and global/local. These allocations are then used to divide the population into the ten segments shown below, each of which has its own name and motto with the additional depth dimension of flexibility (F) and structure (S).

Figure 4 Lifestyle segmentation based on attitudes and values

1 *Enthusiasts* “Everything is worth trying” Vitality, high energy, activity, independence, curiosity, unprejudiced.

2F *Trailblazers* “There are always options” Sense of responsibility, involvement in community issues, expertise, intuition, self-confidence, maturity, and harmony.

3F *Fast movers* “What fun can be had today” High energy, fast pace, networking, situation-based ethics, new opportunities, risks, breaking boundaries.

4F *Caretakers* “We are all in the same boat” Rational, sense of responsibility, co-operation, empathy, practical orientation, solidarity, careful.

5F *Jacks-of-all-trades* “A lot of work, a lot of fun” Freedom, adjustment, practical orientation, self-confidence, competition, carelessness: one day at a time.

2S *Guides* “It’s for your own good” Caring, control and discipline, caution, authority and hierarchy, continuity, nostalgia, sense of responsibility.

3S *Appearance-makers* “I wonder what’s in” Appearance, trendy, adventure-seeking, extreme, experiences, feelings, competition, status.

4S *Keepers* “Let’s think it over some more” Traditions, duties, loyalty, trust, defence, peacefulness, law and order.

5S *Seekers* “It would be nice to have/be...” Enjoying life, consumption, goal-orientation, security, status, fashion, hedonism, materialism.

6 *Satisfied* “Home sweet home” Being together, careful, loyalty, habits and customs, the small joys of life, home and everyday life, predictability.

Lifestyle segmentation based on social relationships

A Swedish study by Bolund, Henriksson et al. (1998) segmented people into different lifestyle types depending on their social relationships :

Egalitarians - experience strong group solidarity and perceive nature as perishable. Their strategy of social survival is to balance the differences within the group and avoid the ranking of the group in relation to other groups. This strategy implies that individual satisfaction depends and is limited by the common group interests; otherwise there would be no incentive to balance the differences. This group is the most ready one to consider the possibility of satisfying its needs through reduced consumption.

Individualists - are related to each other through networks, rather than form a unified entity. They perceive the nature as being rich and endless, which individuals can control with their skills, which leads to the approach of trial and errors in relations with nature. At the same time, individualists are trying to balance needs/wants and resources at a high consumption level. This group provides individuals that are more ready to take risks, to try new things and new ways.

Hierarchists - experience strong group solidarity and perceive nature as generous. They respect rules and norms that are put forward by authorities.

Fatalists - to a large extent depend on rules and norms, but have weak group solidarity. They perceive nature and existence as unforeseeable and unstable. Therefore, they have a limited motivation to change both their own and group consumption of resources.

Lifestyle segmentation: Cross Cultural Consumer Characterization (4Cs)

An example of a lifestyle classification model developed by the advertising agency, Young & Rubican, is the so-called Cross Cultural Consumer Characterization (4Cs) (Mazanec and Zins, 1993). The seven segments that this classification distinguishes are (Mordin, 2009):

Resigned - Rigid, strict, authoritarian and chauvinist values, oriented to the past and to Resigned roles. Brand choice stresses safety, familiarity and economy. (Older)

Struggler - Alienated, Struggler, disorganised - with few resources apart from physical/mechanical skills (e.g. car repair). Heavy consumers of alcohol, junk food and lotteries, also trainers. Brand choice involves impact and sensation.

Mainstreamer - Domestic, conformist, conventional, sentimental, passive, habitual. Part of the mass, favouring big and well-known value for money 'family' brands. Almost invariably the largest 4Cs group.

Aspirer - Materialistic, acquisitive, affiliative, oriented to extrinsics ... image, appearance, charisma, persona and fashion. Attractive packaging more important than quality of contents. (Younger, clerical/sales type occupation)

Succeeder - Strong goal orientation, confidence, work ethic, organisation ... support status quo, stability. Brand choice based on reward, prestige - the very best . Also attracted to 'caring' and protective brands ... stress relief. (Top management)

Explorer - Energy - autonomy, experience, challenge, new frontiers. Brand choice highlights difference, sensation, adventure, indulgence and instant effect - the first to try new brands. (Younger - student)

Reformer - Freedom from restriction, personal growth, social awareness, value for time, independent judgement, tolerance of complexity, anti-materialistic but intolerant of bad taste. Curious and enquiring, support growth of new product categories. Select brands for intrinsic quality, favouring natural simplicity, small is beautiful.(Higher education)

Lifestyle segmentation based on adoption of innovation

People are also different when it comes to how they adopt new products and innovations. The Innovation Framework by Rogers (1995) identified five groups of people based on five steps, through which an adopter goes in order to adopt a new product or a service (Rogers, 1995: p. 36):

First knowledge of an innovation → forming an attitude toward the innovation → decision to adopt or reject → implementation of the new idea → confirmation of the decision

Rogers maintained that people accept innovation differently, depending on their personality, their innovativeness, and interpersonal communication, and according to this they could be classified into innovators, early adopters, early majority, late majority, and laggards (Figure 5). Innovators seek newness and value the time period that is passed since product launch. Laggards seek reassurance and confirmation about product or service qualities through interpersonal communication and word-of-mouth. A large number of studies have analysed the differences between earlier and later adopters based on socio-economic, demographic, cultural, or psychological criteria (Tornatsky, Eveland et al., 1983), (Gatignon and Robertson, 1985), (Frank, Sundqvist et al., 2001), (McMeekin and Tomlinson, 1998), (Cestre and Darmon, 1998).

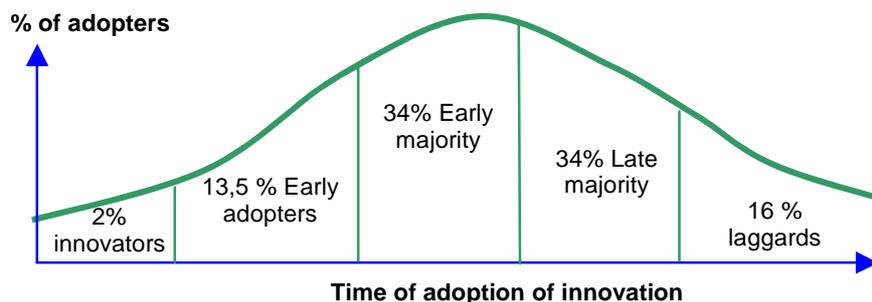


Figure 5 Adopter categorisation on the basis of relative time of adoption of innovations (Rogers, 1995)

In order to attract innovators, the product should have certain qualities that are easy to display and could be easily associated with being “on the cutting edge of technology”: “the relationship between social influence and adoption intention is stronger when an innovation is publicly consumed rather than privately consumed” (Kulviwat, Bruner et al., 2009). For the laggards to join, there is another mechanism – the desire not to be left out of the group – that can be used to speed up dissemination of more sustainable practices (Rogers, 1995).

3.3.3 Consumer segments and their consumption patterns

While differences in class and lifestyle affect consumption, there are also significant differences between consumption patterns and levels between people from different geographical areas, of different age, gender and income, as well as among people with different levels of education – people with different demographic features. These different groups of people and their relation and influence on consumption patterns and levels will be considered below.

Geographic differences in consumption patterns and levels

Geographic differences in consumption patterns is gaining importance especially in the light of globalisation, the proliferation of multinational companies and the emergence of the global consumer class (Worldwatch Institute, 2004: p. 6). Perhaps the most astounding are the differences between consumption patterns among different regions. In Europe, as in US and Asia, consumer spending is dominated by a middle class. The Eastern European middle classes wish, to varying extents, to emulate lifestyles in the US and Western Europe, including such aspects as the home, technology, wellness and leisure. Thus much of the middle class spending is aspirational and aimed at emulation, rather than spending for fulfilling basic needs (Hedley, 2007).

Table 2 Regional differences in consumption patterns (Euromonitor International, 2008)

| | US | European | Asian |
|---------------------------|--------------------|--------------------|------------------------|
| Aspirational spending | Strong | Strong | Very strong |
| Brand trust | Moderate/Weakening | Moderate/Weakening | Strong/weakening |
| Tobacco, drink, fast food | Declining | Declining | Growing |
| Shopping as entertainment | Moderate | Moderate | Strong |
| Mall as community | Very strong | Moderate | Weak/strengthening |
| The home | Strong | Strong | Moderate |
| Health and beauty | Strong | Strong | Moderate/strengthening |
| Convenience | Strong/moderating | Strong/moderating | Strong/strengthening |
| Ethical | Strong | Strong | Weak |
| Goods provenance | Strong | Strong | Weak |
| Fair-trade | Moderate | Strong | Weak |
| Wellness | Very strong | Strong | Weak/strengthening |
| Discount | Moderate | Strong | Moderate |

When looking at the Western European consumption patterns, there is also a certain difference among countries. For example, a study on household metabolism revealed the following differences in household spending among 4 European countries with relatively similar values and lifestyles (Moll, Noorman et al., 2005).

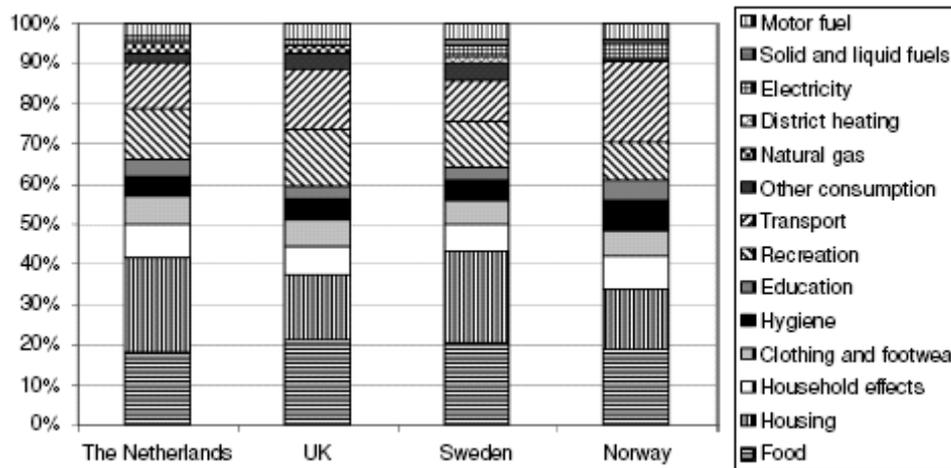


Figure 6 Division of expenditures per budget category for an average household in the different countries (Moll, Noorman et al., 2005)

How income and level of education influence consumption patterns and levels

An interesting perspective on how income is spent by different classes and sub-classes in Sweden is provided in the study of Bihagen (1999). It demonstrates that the higher white collar class spends significantly more on household services (housekeeper etc.), association fees (e.g. membership fees), travels of all kinds, “high brow culture” (concerts, theatre etc.), cinema, sport activities, photo services, eating out and “looks” (cosmetics and hairdressing). Skilled workers spend slightly more than non-skilled workers on “high brow culture”. These two classes have much higher expenditures on tobacco and lotteries than other classes. Higher white collars not only travel more often but also pay more when they travel and pay four times the amount for association fees compared to non-skilled workers. The higher white collars spend more on “information”, including spending on books, papers, magazines, writing material, telephone fee, stamps etc., as well as on insurance and “clothes and shoes”. Looking at ownership of durables, higher white collars, compared to the working classes, more often own a computer (2.5 times as often), a holiday cottage (twice as often), a boat (not more often than skilled workers however), a dishwasher and a tumble drier. Workers on the other hand more often own a caravan (up to twice as often), a washing machine and a car than both higher and middle white collars (Bihagen, 1999). This study concluded that in addition to class differences, there are types of consumption that are also affected by composition of the household, gender, region, age, and income.

Age differences in consumption patterns and levels

People have different lifestyle patterns and their behaviour changes as they pass through different stages of life (Toivonen, 1992). For example, a family with small children is likely to have a different lifestyle to an older couple, whose children have left home. Depending on their life situation, people have very different consumption patterns. For example, families with children obviously have consumption of specific items, such as diapers and baby food; while holidays are developed for families, singles in their 18-30 and for people in their 50's. One of the most well-known life cycle models, the “sagacity lifestyle model”, identifies four main stages in a typical life cycle; each group is then further subdivided according to income and occupation:

- Dependent (e.g., children still living at home with parents);
- Pre-family (with their own households but no children);
- Family (parents with at least one dependent child); and

- Late (parents with children who have left home, or older childless couples).

There is a growing attention to new groups of society that were previously often excluded from studies of consumption patterns: children and teenagers. Understanding is increasing that children, although not having direct income, play an increasingly important role in consumption and decision-making regarding purchasing.

“Contemporary American tweens and teens have emerged as the most brand-oriented, consumer-involved, and materialistic generation in history. And they top the list globally... More children here than anywhere else believe that their clothes and brands describe who they are and define their social status” (Schor, 2004: p. 13).

Children are brand conscious and sometimes possess knowledge about purchasing and consumption that their parents lack (Ekström, 2007). A number of factors have been found that affect the level of materialism in children and adolescents: family environment, parenting style, peer interaction, and media exposure. One study suggests that all these factors affect materialism through children’s self-esteem (Nguyen and Roedder, 2007).

Young people tend to have a larger degree of “high class consumption” than do older people (Bihagen, 1999). On the other hand, they also demonstrate smaller class differences, which indicates the emergence of a new classless generation according to some sources. However, some studies also show the significant impact of national culture on the young people purchasing decisions (Ganassali, Cherhiello et al., 2007). When it comes to evaluation of teenagers’ behaviour, in an international survey of youth 60% of respondents consented to the statement that people of their own age are consuming too much (themselves included), but 44% also agreed that having more would make them even happier (UNESCO and UNEP, 2000).

Retired households spend a small proportion of income on necessities and more on gifts and various kinds of contributions, when compared with the non-retired family (McConnel and Deljavan, 1983). Another important trend is the increasing age of the population as a whole, with consequences on consumption being increasing demand for services, retirement homes, health-care and different types of entertainment targeted at older people. On average, Europeans who are over 60 are less wealthy than younger people and have lower household expenditures (Michaelis and Lorek, 2004). However, many who were young adults during the boom years of the 1950s and 1960s, and who also were able to establish generous final salary pensions, now have the opportunity to travel, to afford different types of entertainment and spending and otherwise enjoy their retirements.

Gender differences in consumption patterns and levels

Even in “equal” Sweden, men earn and consume more than women (Nyman, 2002). In other OECD countries, women typically make over 80% of consumption related decisions, while men may spend more than 80% of household funds. This reflects the inequality between men and women in families in terms of access to power and resources. A study of the World Bank has demonstrated that gender differences are greatest among the poorest families (World Bank, 2001). Women typically buy cheaper everyday and recurring consumer essentials for the whole family, such as food, clothing and household articles, while men tend to buy expensive capital goods and luxurious products, such as homes, cars, IT and HiFi equipment, yachts and motorcycles. Women spend more than men on consumer goods, including hygiene, health and clothing, while men consume more alcohol and tobacco, and spend more on transport and sport (Johnsson-Latham, 2007). There are also studies demonstrating that women are more likely to make impulsive purchasing than man (Joh, Arentze et al., 2006).

On the other hand, they are also more conscious when it comes to buying ecological and organic products.

Gender differences exist also when it comes to buying services or engaging in leisure activities. For example, a study by Firestone and Shelton (1994) showed significant differences in leisure patterns of men and women, in that men spend more time than women on social entertainment, sport activities, eating out and going to various plays and movies. On the other hand, women have a larger degree of “high class consumption” and they are more interested in “high brow” culture (theatres and museums) than men (Bihagen, 1999). One possible explanation is the correlation between “high brow” culture and education. Since in many Western countries, women have become more educated than men, they have also increasingly entered this cultural sphere. The outcome may also be a sort of feminisation of these activities with the consequence that these activities lost symbolic status among men, who are forced to look for other means of distinction than visiting theatres and museums (Katz-Gerro, 2002).

In terms of travel, men tend to travel more for business, while women travel more for leisure and pleasure (Collins and Tisdell, 2002). Gender differences in Internet access and usage have been reported in a number of studies. They demonstrate that there is a gap between men and women in the access and extent of internet use, however the gap is closing (Wasserman and Richmond-Abbott, 2005). In terms of use patterns women report that the Internet helped them with “having made new friends or having met their partner, renewing old friendships, accessing information and advice, studying online, and shopping and booking travel online, ... [men] ... mentioned that the Internet had helped or given them a career, [and] positive socio-political effects” (Colley and Maltby, 2008).

4 Lessons from the review of evidence

Chapter 2 discussed how the structures of our economic and political systems embed different patterns and levels of consumption in mainstream society, while chapter 3 has explored some of the psychological issues and social structures that ensure that consumption is deeply embedded into the very fabric of our society and has become “the norm” to be followed by everybody. Although the factors shaping consumption were arbitrarily divided into two groups – people and social forces and policies and market forces, it is clear that the various factors complement, build upon and influence each other.

What has also been demonstrated in the introduction is that current levels and patterns of consumption are unsustainable and cannot be supported in the future, especially if global equality issues will become a guiding principle of a more sustainable future society. This realisation goes against the basic mechanism of the current economies – economic growth, which is in line with current economic policy in the European Union and much of the rest of the world. There is thus an urgent need to reconsider the main premises of societal development and to find pathways towards a more economically prosperous, socially just and environmentally sustainable society. This is of course a daunting task, but as a starting point it is important to collect lessons from the study about the factors that shape consumption, and apply them to our thinking of potential steps towards sustainable consumption.

This chapter discusses the lessons learned about factors that influence consumption from chapters 2 and 3, and explores the relevance of this knowledge for pro-environmental behaviour and sustainable consumption. It presents how the factors examined in the report influence consumer behaviour, and the implications of this for a potential move towards sustainable consumption patterns and levels. The relevance of this knowledge on consumer behaviour for policy making is also discussed where relevant.

4.1 From policies and market forces

4.1.1 Economic factors

Section 2.1.1 outlined some of the premises of neoclassical economics on which majority of economic instruments and modern policy is based. However, it has become increasingly clear in recent years that “*economics in its mainstream neoclassical form is failing to provide an intellectually coherent explanation of economic reality, especially with regard to such issues as the nature of markets, environmental degradation, persistent poverty and household production, and is therefore responsible for much flawed policy advice*” (Ekins and Max-Neef, 1992). It is also clear that neoclassical economics has failed to provide an understanding of people in their role as consumers and citizens that is useful for policy development in the field of sustainability. Other schools of economics, such as ecological economics are much better suited as a basis for developing policies addressing consumers and consumption.

One of the main premises of the neoclassical economics that has been discussed in section 2.1.1 is the *sovereignty principle*, which influences the way economic policies and instruments are developed. The principle is also often used to justify or explain the lack of consumption policies. We have already used the, examples of tobacco and alcohol to demonstrate that governments do interfere with markets when health issues of people are at stake. Similarly, governments can interfere in markets of product groups that have significant environmental impacts; this is already done in some cases, e.g. PCB or asbestos use. Governments also find it necessary nowadays to introduce measures for controlling environmental messages in advertising and marketing. They can become even more involved in issues of choice editing, assisting or prompting businesses to remove the most environmentally damaging products from the market (Michaelis, 2000).

One of the most obvious ways for governments to promote sustainable consumption is by extending the application of instruments already in use in broad range of areas, namely *instruments affecting time and income of consumers*. Shifting income to leisure time (working fewer hours for a reduced income and having more leisure time) has been named as one of the potential areas for governments to address unsustainable consumption (Ausubel and Grubler, 1995; Sanne, 2005). This idea has already been tested in a number of European countries through shorter work week (Schor, 2005b), e.g. in France working week has been reduced to 35 hours (Christensen, Godskesen et al., 2007). Studies also demonstrate that people with higher income have higher environmental footprints (Bradley, 2009), so shifting incomes to leisure time could help reduce their environmental profiles.

Many other features of the current economic framework influence consumption patterns and levels. As was demonstrated in the section 1.1, current consumption patterns and levels are not sustainable, and one of the important areas that needs specific attention of policy makers is the incentives that are currently provided to people to *save and spend*. The availability of personal credit and the prevalence of ubiquitous advertising encourages people to spend (see section 2.3.2), creating a “work and spend” cycle (Schor, 1999b). There is thus a need to rethink the social costs of using personal credit to stimulate consumption (Michaelis, 2000).

Another way for economic instruments to promote more sustainable society is to make prices incorporate the environmental and social costs of products and processes (Gee, 1997) and to tax environmentally damaging products and activities (WorldWatch Institute, 2008). This would have effects on both industries and consumers and would make environmentally and socially responsible choices economically beneficial and normalised in society.

4.1.2 Policy factors

One of important rationales for consumption patterns are existing institutional settings (Mark Sagoff, cf. in Harris, 1997). Public policy, as one of the important institutions, shapes nearly all consumer decisions through its influence on different aspects of everyday life – from a simple permit to sell a product to failing to regulate for the full environmental costs of natural resources and products. One example of public policy affecting environmental performance could be a poorly developed system for public transportation, which induces a more extensive use of private cars in the USA.

As outlined in section 2.1.2, there are a number of policies that influence consumption. However, both the competition policy and trade policies, and even the innovation policy are based on the growth mentality that links the increase in economic output with increase in human well-being, which has been shown to be a false assumption of neoclassical economics. The policies could instead be guided by alternative societal goals. Some ideas for how the main premises of the economic frameworks and political systems could be changed to promote prosperity without growth have already been suggested (Jackson, 2009).

Besides the aforementioned policies that indirectly influence consumption, there is a lack of policies that shape consumption in more sustainable direction (Tukker, Diaz-Lopez et al., 2008). A number of reasons can be identified that contribute to the slow overall progress towards effective sustainable consumption policy development.

In their decision-making processes policy makers typically rely on assumptions grounded in the traditional neo-classical economic views, which see consumers as utility maximisers with bounded rationality who express their preferences in a formal market. The consumer behaviour model underlying the mainstream policies is based on the assumption that *inappropriate price* signals and lack of trustworthy and authoritative *information provision* are the main barriers to more sustainable behaviour of consumers, who are otherwise totally committed to the goals of sustainable development. Although the use of economic instruments to ensure that the price of products and services reflects environmental and social costs of their production and consumption remains pivotal, these are only two variables that influence consumer decision-making and in that sense might not be the most crucial ones (OECD, 1997).

However, a range of consumption-oriented policies or policy instruments have been developed based on these assumptions. The majority of them focus on adjusting for market failures by providing more accurate information to consumers (e.g. ecolabelling and awareness raising campaigns) and by correcting prices (*internalisation of environmental and social costs* or Ecological Tax Reform (EEA, 2009)). *Ecolabelling* and similar information tools face a difficulty in that consumers have been shown to become easily confused by the amount and the diversity of the information (Salzman, 1997). In addition, these tools reduce the complexity of human behaviour to few universal features. Reliance on measures to improve consumer information provision, which allows them to use individual purchases as support for certain products, has only a limited impact, as consumer pressure only affects products that are familiar to consumers. Sociological studies demonstrate, and environmental studies confirm, that provision of information does not necessarily lead to changes in attitudes and even when it does, the change in attitudes does not always translate into behaviour change (Kollmuss and Agyeman, 2002). An additional drawback of information provision tools is that the majority provide information on material and not much on immaterial offers and as such still stimulate consumption of green goods, which also has negative impact on the environment, albeit smaller than consumption of traditional goods (Bougherara, Grolleau et al., 2005). Campaigns, especially the so-called “simple and painless” campaigns, can also

give the false impression that by taking small steps big changes can be realised. This is however not supported by scientific evidence that demonstrates that if “everyone does a little, we’ll achieve only a little” (Crompton and Thøgersen, 2009). Finally, a major weakness of information instruments and specifically of educational campaigns that address public knowledge problem stems from the complexity of human interaction with other members of society and with institutions that are deeply rooted in contexts and infrastructures that are largely not conducive of living sustainable lifestyles (Holdsworth, 2003).

The first decades of environmental policy have also largely failed to acknowledge the pivotal role of *changing consumers’ lifestyles* and not only their patterns and levels of purchasing goods and services. Seeing people only as consumers means that consumer decisions to delay or avoid purchase - to stay away from shopping - are not taken into consideration (Peattie, 2001). This also robs people of another alternative - to satisfy their needs in less materialistic ways and to aspire to personal development rather to “keeping up with the Jones”. The current policy instruments for sustainable consumption are limited to the choices consumers can make in the formal market. This means that people who are unable, cannot afford or are simply not willing to participate in the market have little opportunity to be heard. One of the reasons for the latter might be the feeling that their purchasing decisions are unlikely to stimulate the supply of more environmentally- or socially-sound products and services (Holdsworth, 2003).

4.1.3 Technological innovation

Both scientific and technological innovation can greatly contribute to creating a more sustainable society. However, we should remember that technology is a double-edged sword: it can serve both constructive and destructive purposes. One can think of nuclear power which can be use for creating arms and which can be used for generating electricity. Similarly, a fuel efficient car can potentially reduce the overall environmental impact of personal mobility, but may also enable longer journeys and thereby increase the overall environmental damage from personal transport. This suggests that technological innovations need to be governed with an awareness of moral codes and by prioritising the common societal good.

As demonstrated in section 2.2.1, technological innovation is a cause of increasing standards of living across the globe, but is also a reason for increased population and increased levels of consumption. Technology has an important role to play in reducing both population growth and negative impacts of consumption. For example, science and technology can play a crucial role in developing and providing effective birth control methods that can prevent population increases, since there are still around 100 million women in developing countries who do not want additional children and 20% of births are unwanted (Bongaarts, 1992).

New R&D and innovative technologies are emerging on daily basis; nanotechnology, medical science, new chemicals and new composite materials; new products and production processes. So far, however, technological innovation and policies for promoting it have been largely focused on R&D spending and on subsidising specific technologies without much consideration for their impacts on sustainability. National systems of innovation tend to be guided by goals of maximising competitiveness and not by sustainability goals (Andersen, 2004). Thus a more coherent approach to innovation for a low-carbon sustainable society is needed, and more focus on improving the resource efficiency of products and product systems is needed. There is huge room for improvement of many products. For example, the efficiency of even the most fuel efficient cars is far from desirable: out 100 litres we pay for the gasoline only 2 litres goes into the mobility function (Fussler, 1996) and only 10% of energy used in a light bulb is transferred into the light (Hawken, Lovins et al., 1999). Technological innovation and systems of national innovation also sometimes gets “locked in”

into perfecting existing technical solutions that are unsustainable and for which innovation may bring about only incremental improvements rather than radical ones. For example, awards are being given to water and energy-efficient washing machines that use washing powder that pollutes water and puts under pressure waste water treatment plants, while there are technologies emerging that could wash with ultrasonic technology or with CO₂. There are also other much more natural alternatives available for washing our clothes, e.g. Indian soap nuts, *Sapindus Mukorossi*, that were used for thousands of years (Stoffels, 2008), which however are of no interest for national systems of innovation since they do not support any of the industries that already exist in all the countries producing washing machines or washing powder.

In recent years we have witnessed the emergence of more efficient technologies and more eco-efficient products: products are becoming smaller, they use less energy and other consumables during their lifecycle, they may contain less toxic materials and may have fewer environmental impacts per unit of product. However, despite these clear trends, the amount of products per household and person is growing and the overall size and speed of material and waste flows in society is mounting. This is because product life-spans are generally decreasing, exacerbated by the “throw-away mentality” created with the help of advertising and marketing, increase in disposable income and valuation of labour over resources (Slade, 2006). To make society more sustainable, closed-loop systems and resources and materials should be encouraged, along with longer products life spans, so that products become capital assets rather than disposable goods (Mont, 2004). An extension of the service life of products leads to slower circulation of products and thus to a deceleration of material throughput in the economy. The words of Henry Ford should become an inspiration for producing durable products; in 1924 he wrote:

“It is considered good manufacturing practice, and not bad ethics, occasionally to change designs so that old models will become obsolete and new ones will have to be bought either because repair parts for the old cannot be had, or because the new model offers a new sales argument which can be used to persuade a consumer to scrap what he has and buy something new. We have been told that this is good business, that it is clever business, that the object of business ought to be to get people to buy frequently and that it is bad business to try and make anything that will last forever, . . . Our principle of business is precisely to the contrary. We cannot conceive how to serve the consumer unless we make for him something that, as far as we can provide, will last forever. . . . We want the man who buys one of our products never to have to buy another” (Ford and Crowther, 1924/2006: p. 148-149).

In addition to designing durable and upgradable products, the environmental impacts of many products from the use phase must also be addressed. For many durable products that use any kind of consumable during their use time – fuel, energy, water, washing powder, etc – the largest environmental impact is generated in the use phase; therefore improving efficiency of the use-phase should be a major priority in improving environmental performance. Environmental impact is, to a large degree, affected by how the product is used by the consumer, reinforcing the need to address the use-phase impacts. An emerging field in product design for sustainability is behaviour steering technology, which guides the users into more environmentally sound behaviour when products are used (Jelsma, 2000). Thus green behaviour is built into product design and does not require direct engagement of the consumers. This means that the awareness building and attitude construction phase can be surpassed and behaviour change can take place without large changes in consumers values regarding the environment, sustainability or consumption. Examples of such products are energy efficient light bulbs, water efficient toilet flushers, and low flow shower heads.

However, this approach has been criticised precisely because of this user disengagement. This criticism argues that scripting consumer behaviour through technological innovation fails to address the need to reduce consumption levels and that addressing environmental and climate change problems will imminently require “*engagement with the values that underlie the decisions we make and a sense of who we are*” (Crompton, 2008: p. 5).

Information technology has been portrayed as a means to drastically reduce environmental impacts in many spheres of our daily lives: reduce travelling by substituting it with videoconferencing, decrease impacts from offices by reducing amount of paper used, etc. It has also been seen as a great way to connect people and shrinks the distances between producers and consumers making it “*more and more difficult for us to pretend that starvation, acute poverty, and environmental degradation do not exist*” (Meeker-Lowry, 1988). Information technology has entered many domains of everyday life and it also helps us to save time, as many daily routines can be done through computer or even a mobile phone: checking bus and train schedules, staying in touch with friends and family, paying bills and making shopping lists for an evening meal. Information technology can also play an important role in promoting more sustainable lifestyles by providing information on, for example, the most efficient travel routes or on the availability of environmentally and socially responsible product choices in shops. However enabling access to products and services makes it easier for people to want more of them, to buy and to use them, contributing to increasing environmental impacts during the use phase and leading to growing amounts of hazardous waste from disposal.

This section and section 2.2.1 have demonstrated that technological solutions have some potential to reduce environmental impacts, but on their own they fall short of producing results that would stabilise current environmental burden at sustainable level. The reliance of policy makers on technical solutions to achieve sustainability goals is thus unjustified, in that it undermines the complex character of human nature, human interactions with technology and other members of society. Although technological improvements no doubt have large potential to reduce environmental impacts of current lifestyles, their contribution to sustainable consumption has limitations, and is often negated by various types of rebound effects (Sorrell, 2009). Thus, together with acknowledging the power of technology, its limitations should not be forgotten and measures to tackle unsustainable patterns and levels of consumption involving people aspirations, values and behaviour need to be devised.

4.1.4 Infrastructure

The importance of infrastructure in shaping behaviour and lifestyles has been discussed in section 2.2.2. It was demonstrated that even when people want to live more sustainably, they sometimes find themselves “locked-in” to existing patterns of behaviour by the infrastructure around them, as well as economic regulations such as taxation, subsidies etc. that promote certain patterns of behaviour over others (Van Vliet, Chappells et al., 2005). This discussion also has implications for pro-environmental behaviour and for understanding drivers and barriers for sustainable consumption (Otnes, 1988; Røpke, 1999; Sanne, 2002). This literature demonstrated that since infrastructure systems are so large and embedded into many aspects of everyday life, they might become a barrier to change even if the consumer is interested in shifting to a different mode of consumption (Otnes, 1988).

For example, various subsidies to the aviation industry ensure that flying is a cheaper alternative to rail or bus travel in many situations, thereby encouraging more unsustainable transport and tourism. One of the important barriers to changing existing infrastructures is of course the actors behind these infrastructures who aim to maximise the return on their investments into the infrastructures. Another consideration is of course the image created and

associated with some infrastructures. Some consumer studies show that people perceive being at the airport as exciting, while the same is not often mentioned about other means of transport (Platt and Retallack, 2009). Train stations are seldom perceived as exciting; they are often associated with dirt, noise and homeless people. Thus if travelling by busses or trains is to become a viable alternative, investments need to be made not only into hardware – the infrastructure itself, but also into marketing of these means of transportation as cool and modern, emphasising benefits for people and the environment.

Urban policies can support city design that reduces both urban sprawl and the need for transportation or that improves safety on the streets allowing people to walk instead of taking car for safety reasons; that improves provision and access to communal services and public facilities; that supports energy and water saving measures for houses and development of the efficient waste management system; that encourages continuous monitoring of resource efficiency in buildings, etc. There are many success stories and they provide inspiring examples; for example the car-free districts in Vienna (Hertwich and Katzmayr, 2004). However, so far the role of a single individual or a household in directly influencing infrastructure development has been rather limited. Nonetheless, this is true only in the world where production and consumption is centralised and globalised.

Recent ideas of distributed, localised economies are built on totally different principles than those that underpin current infrastructures. In these new systems, people are not perceived as passive consumers (one of the main premises of neoclassical economics), but rather as active participants in both production and consumption – co-providers of utility. The current large-scale, centralised or highly hierarchical systems of provisions (electricity, water, waste management, etc.) are transformed into small-scale distributed systems of production and consumption that might be interconnected and might sell utility to the central network (Southerton, Chappels et al., 2004). Examples of these new distributed systems can be found within energy sector, where individual houses install photovoltaic cells or wind power units, or use geothermal energy to produce electricity that covers household needs, with excess sold to the central electricity grid, often at a fixed price that guarantees the individual producer the price and allows concrete planning of pay-back time for the investment (Feed in Cooperation, 2007). There is also a developed economic mechanism – fixed feed-in tariffs - that encourage electricity generation from renewable energy sources in 18 out of 25 countries in Europe (Klein, Held et al. 2007). A model of renewable energy community is a Danish island Samsø. In 1997 Samsø won a government competition for using 100% production of electricity from wind power funded by islanders.

An important role of sustainable infrastructure is to enable, support and normalise more sustainable lifestyles. Sustainable infrastructure may mean urban planning that allows and encourages citizens to walk or bike in the city, and the development of public transportation networks that satisfy commuters' need for mobility without reliance on private cars; it may also mean provision of solutions that script behaviour in a more sustainable direction, e.g. electricity meters could become a part of any new building design and could help consumers reduce their energy costs, energy consumption, and related environmental impacts (Platt and Retallack, 2009). Stakeholders involved in provision of infrastructure can not only provide infrastructure for transport, but also create visions of more appealing lifestyles where travel is reduced, where transport infrastructure is designed to assist people in managing their time (being stuck in a traffic jam does not fulfil that purpose), where social interaction among people is encouraged and information technologies help drastically reduce the need for travel. Sustainable infrastructure, with support of proper policies, should ensure that consumers have possibility to spend their money on more energy-efficiency, low-carbon and more socially responsible infrastructure systems. However, as long as decisions regarding infrastructure are

made to satisfy the private interests of few stakeholders rather than long-term societal goals of sustainability and prosperity for all, change towards more sustainable infrastructure is unlikely. Some recent studies depict scenarios of how life in a decarbonised world might look and what kind of infrastructural changes might be needed (Heaps, Erickson et al., 2009).

4.1.5 Business forces

Traditional business models are developed to increase the amount of sold material products since business profits are linked to them rather to other services or other ways of delivering value or satisfying consumer needs. This drives businesses to produce short-lived products so that consumers would come back for repeat purchase in a short time. This is one reason why the life span of products continuously decreases for many products.⁶

In order to address this problem, a diverse range of business models need to be developed that do not rely on ever increasing material throughput to generate profit. Governments could help by supporting innovative business models that are not necessarily built on the premise of selling more material products, but on the idea of creating value and generating profit from satisfying consumer needs through access to and use of products (Mont, 2001b). One way to do it is to extend producer responsibility along entire product life cycle. This would reposition consumers as users, where products are hired/leased/rented rather than purchased for as long as the product is needed. A common name for a broad range of innovative business models that are built on this principle is product-service systems (PSS), which are often defined as “a marketable set of products and services capable of jointly fulfilling a user’s need” (Goedkoop, van Halen et al., 1999). Examples of product-service systems already exist in many sectors: car sharing, washing services, chemical management services, demand-side management and least cost planning and many others. There is a great difference in the dissemination of PSS in various sectors and regions. For example chemical management services already embrace 50-80% of the market in the U.S. automobile industry, 35% in the electronics industry, 20% - in the metalworking industry and 10% in the aerospace industry (Votta, 2003).

In PSS, consumers pay not to buy material goods, but to use them.⁷ In this way there is a decoupling of business profits and consumer spending from material flows in society. This means that low-price, average quality products with low margins for producers can be replaced by fewer, high quality products that act as capital assets for producers since they generate functional units, for which consumers are paying. This model thus creates an incentive for producers to design durable products and to foresee product return for disposal, meaning that design for remanufacturing and cradle-to-cradle becomes a profitable and natural business (Mont, 2001a). In this way, a cyclic economy can be created with much slimmer material flows and associated environmental and social impacts and with much lower emissions (since producers can afford designing environmentally sound goods and consumers can afford paying for using them). The cyclic economy presents a new sphere in each sector of manufacturing, which has the potential to re-create value and create jobs. Shifting sources of public revenue from labour to resources would likely create jobs by making labour cheaper.

⁶ Another reason is of course because it is cheap for businesses to produce new products due to low prices of raw materials and cheap labour in countries where production actually takes place. The global “sweatshop” is the reality: only 1.5% of the costs of a 100\$ sport shoe are attributable to activities during the production phase (i.e. material, production & labour costs), while the rest occurs during later stages of the life cycle (CCC, 2007)

⁷ Ownership and consumer satisfaction still go hand in hand for the majority of people (e.g. car ownership versus use of public transport). Thus, the right package of stimulating and discouraging measures is key to make progress.

In the times of economic hardships PSS model might be more attractive for individuals, since people get access to products and can use them without needing to invest in them. However, ecological tax reform is needed to stimulate PSS business models and a cyclic economy, since they are labour intensive and current labour costs and taxes on labour are very high in most industrialised countries⁸ compared to resources. The proposal to shift the tax burden from labour to the environmental impact and resources is attractive since it creates a win-win situation for employment and for the reduced resource use by encouraging business innovation in energy and resource efficiency. Several examples of innovative business models are provided below.

Together with policies for a more sustainable and low-carbon economy, it is important that governments stimulate environmentally and socially responsible businesses that improve not only their own performance by greening their sites and products, but that also stimulate changes upstream and downstream in the supply chain.

The marketing and advertising strategies currently used to promote non-sustainable consumption patterns could just as easily be used to promote environmentally sound products and more sustainable lifestyles. Advertising tends to be commissioned by businesses, and in turn, many of those businesses rely on high volume sales of material products. It is therefore unsurprising that current advertising and marketing encourages high levels of material consumption.. Those companies that have redefined their business models and started promoting alternatives like product-service systems have an alternative message that focuses on increasing value-added for customer, improving customer satisfaction through establishing long-term relations with them, and securing the function provision for as long as it is required by the customer.

4.1.6 Marketing and advertising

Advertising and marketing are perhaps the most powerful tools that can be employed to create attractive visions of more sustainable futures and lifestyles, products and services, as well as to educate and engage consumers on how to translate these visions into everyday practices. Many examples demonstrate the power of media and advertising in creating more sustainable societies (OECD, 2008).

“If television could transform the entire planet into a global materialistic consumer culture within just 50 years, it could also be used to efficiently promote alternative non-materialistic lifestyles and sustainable consumption. Of course, this would require major changes in the control of mass media and, as discussed below, is likely to be met with strong resistance by many powerful special interests” (Huesemann and Huesemann, 2008: p. 815).

For example, instead of movies and TV shows demonstrating lives of celebrities and super-rich, the same programmes can show the lifestyles of simplicity, spiritual enjoyment and personal development.

One of the interesting examples is the employment of *soap operas* for changing the societal values regarding family size and birth control in Latin America (Ryerson, 1995). Results of one soap opera (*Acompaname*, show from 1977-1978) created with the goal of teaching viewers the ideas of family planning speak for themselves: sales of birth control pills increased by 23% in one year (compared to 7% in the previous year), more than 560 000 women registered in family planning clinics (an increase of 33% compared to a one percent

⁸ In the EU, in excess of 80% of all taxes are income related. (Paleocrassas, 1999)

decrease the previous year) (Institute for Communications Research, 1981). These broadcast soap operas are not only effective means in terms of family planning, they are also much more cost-effective compared to direct financial incentives.

There are some businesses who advertise their more eco-efficient products and services through social and environmental marketing. For example, the majority of car manufacturers and petrol companies send messages about climate change and the environment: Kia's advertising reads: "Think before you drive: for long trips use the Sedona, for short ones use your loaf". Consumer goods industry is increasingly concerned with social and ethical impacts of their supply chains and this becomes one of the important messages communicated by these companies (OECD, 2008): Swedish branch of a European retailer Coop Konsum advertises: "We've stopped selling eggs from caged hens. Take 10 people with you in this telephone booth and you will understand why".

Specialised magazines target environmentally interested and conscious consumers. For example, *Casseurs de pub*, France, publish a bi-monthly magazine that suggests alternatives to consumerism, supports campaigns against it and develops cartoons. The Sustainable Solutions Design Association from Denmark also publishes a fashion magazine *ITCH* that is a source of inspiration for designers, producers of textiles and clothes. Besides, daily newspapers and popular magazines have also started addressing issues of sustainable lifestyles and consumption. However their message is somewhat mixed: articles promoting more modest and sustainable lives being published side by side with articles on luxury consumption lifestyles.

The role of *celebrities* in promoting more sustainable habits and lifestyles is very important: a study demonstrated that 81% of adults thought celebrities and sports personalities should promote healthy foods (Brook, 2005). "Celebrities have been crucial in building awareness on a wide range of things that would otherwise be just a distant concern" says the human rights activist John Prendergast, co-author with Don Cheadle of a book "Not on Our Watch: The Mission to End Genocide in Darfur and Beyond." Hong Kong movie star Jackie Chan has launched the "Jackie Chan New Day Environmental Protection Program" in Beijing (ChinaCSR, 2007), and in 1998, Leonardo DiCaprio started the Leonardo DiCaprio Foundation to promote environmental causes.⁹ More recently, he has been working on a global-warming documentary "11th Hour" featuring interviews with global green leaders. Robert Redford has campaigned for Utah wilderness, promoted solar energy, convinced mayors to tackle climate change, and served 30 years on the board of the Natural Resources Defence Council. George Clooney launched Oil Change, a campaign to eliminate America's dependence on oil. To support the campaign he drives electric car. Brad Pitt supports the emerging green-building movement, helps rebuild New Orleans in an eco-sound way, narrates a sustainable design TV series, and supports Ed Norton's Solar Neighbours Program. The efforts of celebrities are important in creating new visions and encouraging people to shift to more sustainable lifestyles. However, it could be argued that it is the lifestyles of celebrities that also encourage multiple car and house ownership, extensive travelling and overconsumption.

Media is much broader concept than just advertising and newspapers. It includes TV, magazines, books, fashion shows and much more. All these channels should be employed when developing the vision of a more sustainable society. Many examples are already available that demonstrate ways of more sustainable living. For example the Ethical Fashion Show that took place in Paris in November 2004 and brought together 25 designers from

⁹ This and the following examples come from (Grist, 2007)

around the world, or a Fair Trade and organic cotton collection from People Tree organised in London the same year. All these initiatives help create attractive and fashionable sustainable societies.

The power of the *Internet* is used widely across the world to promote more sustainable consumption and lifestyles. For example, Lucire, one of the world's leading fashion sites, publishes stories on fashion, style and environmental and social consciousness and sustainable lifestyles, and there are many other websites that are specifically devoted to promoting more sustainable lifestyles.¹⁰

4.2 From people and social forces

4.2.1 Personal needs/desires and social values/norms

The rational choice model assumes that if consumers have enough information they will make the “right” choices, but this simplistic approach is known to be false (Kollmuss and Agyeman, 2002), (Seyfang, 2004), and information campaigns are known to be among the least effective ways to change behaviour towards sustainable consumption (Jackson 2005b). In fact it is often the people with the greenest attitudes who are doing the most environmental damage: research in the UK by Barr, Shaw et al.(2009) found that the longest and most frequent flights were taken by those with the greatest awareness of environmental issues, including the dangers of climate change.

In addition, it is difficult to separate out our behaviours from the context we find ourselves in, particularly the social norms around us and the infrastructure we live and work in, for example: “People may recycle simply as a result of changes in municipal waste collection services, without ever having decided that ‘recycling is a good thing’” (Jackson, 2005: p. viii).

The importance of values in motivating sustainable consumption is an area of debate, with some suggesting that undertaking sustainable actions leads people to identify themselves as a person who cares about the environment. However, these ideas have been critiqued with counter-evidence that shows that these “positive spillover” effects are exaggerated (Crompton and Thøgersen, 2009) and that undertaking small symbolic actions, such as buying recycling newspapers, is used to justify further unsustainable consumption.¹¹

Our consumption is partly driven by the “needs” and wants created by the socio-economic system, but at a societal level the continual increases in income and consumption tend to perpetuate dissatisfaction rather than improving well-being (Huesemann and Huesemann, 2008). Research into the psychology of well-being shows that genetics and up-bringing account for about 50% of our life satisfaction and happiness, 40% is determined by our attitude to life and activities, and only about 10% come from our circumstances, including income. The area we can influence most is outlook and activities, such as friendships, community involvement, sport, hobbies, and attitude to life (Shah and Marks, 2004). This psychological research on what we actually need for well-being is a useful starting point for re-thinking consumption patterns and levels:

“People don’t need enormous cars; they need admiration and respect. They don’t need a constant stream of new clothes; they need to feel that others consider them to be attractive, and they need excitement and variety and beauty. People don’t need

¹⁰ <http://lucire.com/> and <http://greenliving.about.com/>

¹¹ See (Barr, Shaw et al., 2009) for further information

electronic entertainment; they need something interesting to occupy their minds and emotions...Trying to fill real but nonmaterial needs – for identity, community, self-esteem, challenge, love, joy – with material things is to set up an unquenchable appetite for false solutions to never satisfied longings ” (Meadows, Randers et al., 2005: p. 262).

This is supported by the recent polls of values in EU27 countries that demonstrate that the most important notions associated with happiness are health (73%), love (44%), work (37%), peace (35%) and money (32%) (European Commission, 2008b).

The definition of what people “need” in order to be a “normal” member of society is continually creeping upwards in terms of material consumption. As Christensen, Godskesen et al. (2007) point out, in the past 20 years it has become normal for most European households to own at least one car, and individual telephones, computers, cameras etc. The size and standard of housing has improved, and households now own more equipment, such as dishwashers, printers, coffee makers etc. Most environmental campaigns focus on the areas of energy and water consumption, while the “normal” consumption of all of these material items, including clothes, phones etc that are standard parts of our lives, are not addressed in environmental policy (Christensen, Godskesen et al., 2007).

Consumption policies mostly focus on areas that do not contradict growth-oriented policy, such as buying new electrical appliances which have greater energy efficiency; however, a few policy interventions do have the potential to challenge consumerist values (Christensen, Godskesen et al., 2007):

“In France, the introduction of the 35-hour week has stimulated self-reflection among consumers and encouraged a reassessment of values related to consumption so that less commoditized activities have been favoured and more time is spent together with friends and family. . . .Changing consumer values and priorities might also open up the possibilities for more radical sustainable consumption policies, addressing aggregate consumption and ever increasing standards” (Christensen, Godskesen et al., 2007: p. 112).

The evidence we have seen above suggests that in other contexts, such as work or holidays, people with environmental values also choose unsustainable behaviours, such as flying. This suggests that values are expressed to different degrees depending on a given situation and its norms, infrastructures etc, so that it is possible to be identified as an intrinsically motivated person and still have a large environmental footprint.

The wider context of society seems to also have a marked influence on the extent to which our values translate into behaviours: *“The single biggest factor which appears to interfere with personal norms in the success of pro-environmental behaviours is the existence of external social or institutional constraints”* (Jackson, 2005: p. 56). The situation is complicated further by research showing that people hold multiple value orientations, which are brought to the fore depending on the context and its framing – again showing that contextual factors play a key role in determining which of our personal norms is activated in any given situation (Jackson, 2005).

And values (and social norms) themselves are influenced by wider society, including government policy and communications:

“Policy-makers are (perhaps rightly) uncomfortable with the idea that they have a role in influencing people’s values and aspirations. But the truth is that governments intervene constantly in the social context, whether they like it or not. A myriad of signals is sent out, for example, by the way in which education is structured, by the

importance accorded to economic indicators, by public sector performance indicators, by procurement policies, by the impact of planning guidelines on public and social space, by the influence of wage policy on the work-life balance, but the impact of employment policy on economic mobility (and hence on family structure and stability), by the effect of trading standards on consumer behaviour, by the degree of regulation of advertising and the media, and by the support offered to community initiatives and faith groups” (Jackson, 2009: p. 94-95).

Consideration of values is important in “framing” sustainable actions: we are often encouraged to behave sustainably in order to save money, for example by saving electricity at home. With no appeal to values other than self-interest, it is likely that the money saved will be redirected to other activities that the person values, such as flying on holiday: this rebound effect means that environmental improvements in one area of lifestyle do not automatically result in overall environmental improvement, unless the underlying values of society are to act sustainably. The framing of sustainable actions is also important since many people view sustainable lifestyles as difficult, boring and unattractive - a view mirrored in societal discourse and mass media (Hounsham, 2006). There is little media or official governmental portrayal of sustainable lifestyles that are fun, easy and desirable. Experiences of such movements as voluntary simplicity (Magsamen, 2008) could provide some hints on how to market these alternative lifestyles and marketing experts could advise on how to target this information to the susceptible segments of the society.

4.2.2 Different meanings of consumption for people

As discussed in section 3.2, two types of consumption can be distinguished: conspicuous and inconspicuous. When consuming conspicuously people attach different meanings to products, services and consumption practices; and these meanings are influenced by different levels of the sociological context – personal, family and society. Social norms and values shape consumption culture and have a profound importance for forming consumer choices. These are in turn affected by people’s desire of both differentiating themselves from and affiliating with a particular social group. Both desires contribute to the creation of personal identity and image, confirmation and visualisation of a certain status and eventually to the formation of lifestyle and consumer culture. This mechanism implies that it might be difficult to change the prestigious, unsustainable way of living, as non-members will always struggle to be accepted into the prestigious circle. The contrary is also true: if it is possible to make prestigious lifestyle more sustainable, then it will be easier to solicit more followers into it.

There is also so-called inconspicuous consumption – consumption as a daily practice or habit (section 3.2.3). This ordinary or mundane consumption is of great importance from an environmental point of view, since the domains with the highest environmental impact such as heating and energy consumption at home, as well as food (and to some extent mobility) belong to this type of consumption.

In section 3.2.1 we saw that people use material goods to signify things about themselves and as part of the process of identity construction, for example sports cars. Goods may also have symbolic value for us, such as religious artefacts or family heirlooms. It was also suggested that material goods, and especially branded products, might act as a substitute for the lost sense of community that many Europeans are now experiencing. Many people now attain a sense of community through virtual, online groups and contacts rather than through family, neighbours etc. In the past people would have aspired to ‘keep up’ with the consumption levels of those in their immediate vicinity – neighbours, family members, work colleagues etc; therefore people were usually comparing their consumption levels and patterns to others from a reasonably similar socio-economic group. As mass media communications and

marketing have pervaded ever more deeply into our lives, we are continuously shown consumption patterns from the most prestigious groups in society – we are no longer just “keeping up with the Jones’s”, but people from all parts of society are now aspiring to own designer goods and to live luxury lifestyles with high environmental impacts (Schor 1999b). Schor suggests that the first step in breaking down these associations is to deconstruct the symbolic value of the luxury goods marketed to us, and develop other reactions to them, such as thinking about them as “tacky attempts to buy their way into a personal image of exclusivity” (Schor 1999b: 148).

The role of consumption in social conformity and status differentiation was discussed in section 3.2.2, including the paradoxical situation that while we feel a great need to be ‘normal’ and fit in to our social groups, we also feel a desire to establish our status within social groups by differentiating ourselves from others. Many people aspire to more prestigious ways of living, and this seems difficult to change; however, perhaps it is possible to adjust (and de-materialise) the prestigious ways of life that are aspired to, so that all are aspiring to a sustainable lifestyle.

“What if public attitudes to status competition started changing, so that people saw as tacky attempts to buy their way into a personal image of exclusivity? What if a pattern of upscale purchasing became not something to aspire to but something ‘uncool’ in its inequalitarianism? What is wearing the \$2,500 Jil Sander suit no longer looked upon as power dressing but as overkill? What if, when we looked at a pair of Air Jordans, we thought, not of a magnificent basketball player, but of the company’s deliberate strategy to hook poor inner-city kids into an expensive fashion cycle?” (Schor, 1999b: p. 148).

Section 3.2.3 discussed the role of ordinary consumption and the standards of normal consumption that are necessitated by participation in society, such as needing to buy suits to wear to work. Again, this shows how patterns and levels of consumption become ‘needs’ rather than ‘wants’ for people if they wish to take part in everyday activities and fit in with social and institutional expectations. Most people do not wish to differentiate and draw attention to themselves from others through consuming less, perhaps partly as this could have associations with being ‘mean’ with money, or not being aware of or respectful to social/professional conventions. Such issues could be solved through more official changes in normal standards of behaviour that relate to consumption. For example, in 2009 the prime minister of Bangladesh ordered male government employees (including ministers) to stop wearing suits, jackets and ties to work, to enable air conditioning systems to be used less. In Bangladesh there is not enough electricity to meet demand, resulting in power cuts, so wearing loose clothes to work and keeping the air-conditioning at 24°C or above enables the government to save electricity, which also has environmental and financial benefits for the government (Dummet, 2009). They hope to expand the suit ban to the business sector and eventually re-write Bangladesh’s official dress code; the government has also moved the clocks forward one hour as a daylight saving measure designed to reduce energy consumption (Dummet, 2009). Similarly, Chinese workers have been encouraged by the state council to wear t-shirts instead of suits when working in public buildings, and to keep air conditioning lower than 26°C; the “26°C campaign, which has been in operation since 2005, applies to schools, offices, supermarkets, restaurants, shopping malls, and government agencies (Spiegel, 2007). Japan has a similar “Cool Biz” campaign, which discourages suits and ties and encourages keeping the thermostat at 28°C. “Japanese Prime Minister Shinzo Abe recently set a good example by instructing his cabinet to wear traditional Japanese short-sleeved shirts instead of businesswear” (Spiegel, 2007). The idea has also been taken up in other countries, for example unions promoted the idea in the UK during hot weather, and UN

chief Ban Ki-moon encouraged UN staff in New York to dress down in summer in order to turn down the air conditioning (Kanter, 2008). These examples show that it can be relatively quick and easy to change aspects of normal standards of behaviour, especially if powerful and prestigious groups are included and leaders also act accordingly.

The area of ‘inconspicuous consumption’ also falls within the category of ‘ordinary’, and is of great environmental significance, as includes aspects of household energy use, food consumption, and to some extent mobility patterns – the three consumption areas with the greatest environmental impact (Tukker, Huppes et al., 2006). Although section 3.2.3 showed that some of this consumption is difficult for consumers to influence (such as systems supplying heating to rented apartments), there are some opportunities for more sustainable consumption even in these mundane areas; examples are choosing renewable energy suppliers for home and work, switching to ethical banking and ethical pensions and investments.

The role of habits was explored, and it was suggested that much consumption is routine rather than based on rational, active decision-making. Clearly this is a disadvantage when people are keen to keep their existing unsustainable habits; however, insights into how people can be encouraged to change old habits and establish new ones can help policy-makers to embed sustainable behaviours.

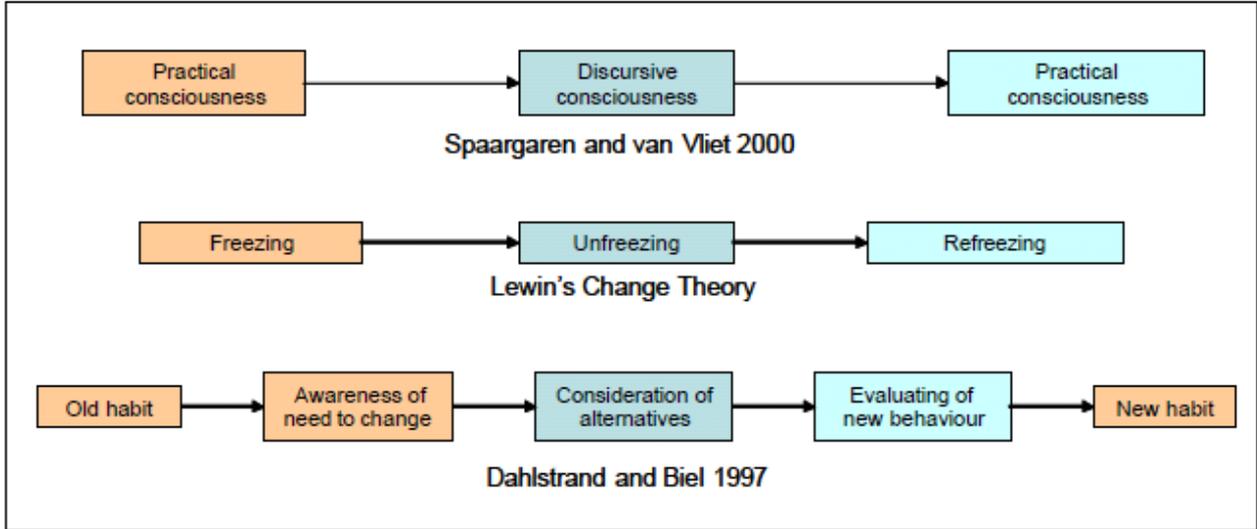


Figure 7 Breaking Bad Habits: some conceptual perspectives (Jackson, 2005: p. 115)

Some of the most important psychological models for understanding the process of breaking habits are shown in the figure above: although routine behaviours are often difficult to change, there is a general consensus within the psychological research. Lewin’s work is particularly influential: existing habits need to be ‘unfrozen’ by examining and challenging accepted ideas, before new behaviours can be tried out, repeated and established in new routines (Jackson 2005). Most importantly, Lewin states that this discussion about new alternative behaviours should take place in a group environment in order to facilitate “open and supportive communication amongst those involved in negotiating the change” (Jackson, 2005: p. 116), which fits with knowledge about the importance of social norms in influencing our behaviour. The notion that habits can best be challenged within a group setting is supported by psychological and sociological research, and also by empirical evidence; for example, Global Action Plan’s ‘Action at Home’ scheme promotes environmental behaviour change through community group discussion and commitment, and has been one of the more successful attempts to promote sustainable household behaviour over the longer term (Burgess, 2003; Jackson, 2005).

In section 3.2.4 the normal practices of everyday life were discussed, and it was suggested that much of our consumption is motivated by good intentions, such as wanting to be a good parent or responsible employee; however, the accepted societal standards and patterns of behaviour involved in successfully executing these respected roles involves certain patterns and levels of material consumption. Schor (1999b) suggests that the material consumption associated with everyday practices could be successfully renegotiated at the collective level, for example, groups of parents setting a price limit on children's birthday parties, or schools ruling that trainers above a certain price cannot be worn in school; such limits could help to remove the social pressure on children and parents, but would be extremely difficult for individuals to adopt. Negotiated informal limits to material consumption are also seen between families and friends, such as wedding gift registers that ask for donations to charities rather than the traditional household goods, or family agreements to limit spending on Christmas gifts. There is an increasing trend to give (and request) gifts of an experience, rather than an object: this has some potential for sustainable consumption depending on the nature of the experience. For example, a massage, cinema visit or cookery course might have a relatively low environmental impact (compared to jewellery for example), whereas a day out driving racing cars could result in significant environmental impacts. However, the concept itself has great potential within a future de-materialised economy.

It was noted in chapter 3 that a focus on everyday practices themselves, rather than on individual consumption decisions, or on institutional frameworks, can be a useful approach to exploring how consumption standards become normalised over time.

Another advantage of the practice approach, noted in 3.2.4, is that it can be useful for avoiding moralising about people who do the 'right' or 'wrong' behaviours in terms of sustainability; instead practice theory focuses on what 'most people' do – what is normal in society, and the potentials for changing *normal practices* into *sustainable normal practices*. This approach fits well with research on social learning, which shows that most people do not change their behaviour in response to messages invoking fear or guilt; these strategies are not effective motivators and can even increase apathy and feelings of helplessness (Hounsham, 2006; Jackson, 2005).

The practice theory approach emphasises the normalisation of continually increasing material consumption in order to take part in everyday life, and this serves as a useful reminder that current levels and patterns of consumption are not natural and inevitable, and are in fact always changing. This is a source of hope for sustainable consumption, as it is the practices themselves (being a good friend, for example) which are important to people – and so perhaps the material components of the practice can be modified over time.

Shove's work on comfort cleanliness and convenience (2003) examines the variety of practices related to bathing, laundering clothes, air conditioning etc, and shows how social norms, technologies and infrastructures combine to set new standards for normal behaviour; Shove suggests that it is these 'normal standards' themselves which should be challenged, rather than only focussing on technical efficiency, in order to avoid the continual escalation of material standards:

"...environmental discourse is dominated by theories of resource economics, by assumptions about lifestyle and choice and by efforts to model and forecast future trends. As a result normal and socially necessary standards of comfort and cleanliness are simply taken for granted, maybe factored in but not subject to detailed scrutiny in their own right" (Shove, 2003: p. 187-8) "...effort should focus on what it means to be clean and comfortable" (Shove, 2003: p. 198).

Within this context it is interesting to return to the fact that a small but significant part of the population does not follow the typical consumption norms described throughout this paper. There is a long tradition of simple living, not least from the spiritual teachings of all major world religions. For example, from Christianity “It is easier for a camel to go through the eye of a needle than for a rich man to enter into the kingdom of God” (Matthew 19:23-24); from Islam “Poverty is my pride” (Muhammad); and Buddhism “Whoever in this world overcomes his selfish cravings, his sorrows fall away from him, like drops of water from a lotus flower” (Dhammapada, 336).

The major religions have long criticised excessive materialism as it is thought to interfere with spirituality and lead to an immoral lifestyle (Belk, 1983) (Belk, 1983). It is also seen as a source of societal ills, such as war, crime, and poverty and it has been denounced by all sages from Buddha to Muhammad, and every world religion has warnings against the evil of excess. Wachtel (1983) argues that “religious founders disagreed with each other in the pictures of what is the nature of the universe, the nature of the spiritual life, the nature of ultimate reality. But they all agreed in their ethical precepts. They all said with one voice that if we made material wealth our paramount aim, this would lead to disaster”.

Thus it seems that consumerism has rather a shallow historical rooting, while moderation seems to be at the heart of many ancient and later teachings, according to Durning (1992). Despite this, it is clear that such spiritual guidance is losing the battle against business interests and governmental policies that support it. Religion does not seem to be the factor shaping current mainstream consumption in Europe, although it provides grounds for various alternative movements, such as voluntary simplicity (Huneke, 2005) (Huneke, 2005).

As noted at the end of chapter 3, there is a small but significant population within Europe today who are making attempts to live more sustainably. The voluntary simplicity movement as a whole has gained momentum in the United States and Western Europe, in addition to growth in associated lifestyles, such as voluntary downshifting (McDonald, Oates et al., 2006). Other examples of current movements linked with simplicity or environmental consciousness are Transition Towns, CRAGS, Give What We Can, the LOHAS movement, Ashton Hayes (the UK’s first self-organising zero-carbon village), Samsø (CO₂ neutral Danish island), as well as those who just try to live sustainable lifestyles because they believe it is the right thing to do.

“The last decades of the century, however, gave rise to the anticonsumerism movement. Fuelled by a variety of concerns such as the environment, overconsumption, abuse of developing nations, and extensive advertising, clusters of individuals began to engage in a range of anticonsumption activities. These activities range from specific product selection based on ethical and/or ecological considerations, to overall reduced consumption and/or the boycott of specific product categories” (Craig-Lees and Hill, 2002).

The study of these individuals, households and groups of people is currently limited, but of great relevance for policy makers in understanding the process people go through in moving toward sustainable consumption (McDonald, Oates et al., 2006).

People may adopt simpler and less materially-intensive lifestyles for many reasons, including dissatisfaction with high-stress lifestyles, and wanting to spend time on activities outside of work as well as environmental concern (Huneke 2005); however, many simplifiers share the common desire to have greater control over their own time and money:

“They want to make deliberate decisions rather than feel they are conforming to the image advanced in advertising and popular culture” (Huneke, 2005: p. 547).

Huneke also discusses the possibility that voluntary simplifiers could ‘blaze a trail’ as early adaptors of more sustainable lifestyles that others would aspire to:

“No single social movement is going to lower overall consumption to sustainable levels. However, the respondents to this survey appear to have found their simplified lives not only less resource intensive but also more intrinsically satisfying, suggesting that this lifestyle may become increasingly widespread” (Huneke, 2005: p. 549).

This picture fits with anecdotal evidence about workers who have been given short-time contracts during the economic crisis (typically working 75% or 80% of normal hours in return for reduced pay): some workers would now prefer to keep their short-time hours and reduced pay rather than return to their normal working conditions – up to 30% of staff in some companies (Pignal and Schäfer, 2010).

This links to research on well-being which shows that a focus on strengthening relationships, connecting with the wider community, pursuing sports and other interests, and having a positive attitude to life, has more potential to improve people’s life satisfaction and happiness than improvements in situation, such as higher income or a bigger house (Shah and Marks, 2004). There is a sense among this minority that ‘less is more’, that having time to enjoy the simple pleasures in life and connecting more with people and environment can bring greater rewards than chasing ever greater levels of career success, status and income.

However, the (limited) research in this emerging field of alternative consumption also suggests that it is extremely difficult to live in opposition to mainstream values and institutions, and as a result sustainable lifestyles are currently not a realistic or attractive option for most people, who do not want to be an ‘outsider’ or pioneer to this extent (Jackson, 2009).

4.2.3 Different groups of people and their consumption

Sociological studies study consumption as a collective process that takes place in social groups and contexts. This means that behavioural change towards sustainable consumption must also occur at the collective level – individual changes are clearly insufficient (Jackson, 2005). This has implications for both governmental policies and for business strategies that while targeting individuals should also consider the group dynamics and contextual factors that influence individuals in a social setting.

The discussion held in section 3.3.1 about whether class is important for consumption or not is also relevant for the discourse on sustainable consumption. According to Beck (1992), nowadays social class is defined not only by a person’s occupation, wealth, income or status, but increasingly by the lifestyle one chooses. Some authors even posit the birth of a “new-middle-class” with its new “leisure lifestyle” and consumption-based ideology (Featherstone, 1991; Slater, 1997). These new-middle-class lifestyles are extremely energy-intensive: measured in terms of Human Energy Equivalent (HEE) that equals 10 MJ per day, people nowadays use 15 times of that amount of energy, with the USA using 93 HEE and Bangladesh using 4 HEE in 1997 (Common and Stagl, 2005: p. 76). These energy-intensive lifestyles are built on principles of individual independence and freedom that result in increasing numbers of households and individual products, e.g. mobile phones, TV sets, etc. (Røpke, 2009a). Freedom and individualisation is also translated into private modes of transportation and longer distances for work and pleasure; a much more varied diet of off-season and long-distance exotic foods. People in these lifestyles tend to work more, buy more time-saving household machines and use the little free time they have left for exploring innovative market offers and searching for novel and exciting experiences (Røpke, 2009a). These lifestyles become normalised and embedded not only in developed economies, but are

also desirable and copied by emerging consumer economies e.g. China, India, Brazil and Russia (Worldwatch Institute, 2004).

Section 3.3.2 discussed the fact that different groups of people react differently to different products, campaigns or other activities targeted at them. These groups can be constructed not only based on traditional demographic criteria, but also based on different lifestyles. These lifestyle segments can also be useful when the shift towards pro-environmental or sustainable consumption behaviour is discussed.¹² The lifestyle segmentation tools often used for marketing purposes, are now being used as a basis for segmenting people with regard to their attitude or behaviour towards sustainable consumption and sustainable lifestyles (Barr and Gilg, 2006).

For example, values-modes analysis is an approach to mapping the values behind behaviour, and has been developed for audience segmentation within an environmental context, with a focus on behavioural change. The three main segments correspond to three values-modes: *Settlers*, who are predominantly security driven; *Prospectors*, who are outer-directed or esteem driven; and *Pioneers*, who are inner directed (Crompton, 2008).

“Settlers are: socially conservative, concerned with the local, known, identity, belonging, and prefer trusted channels and known behaviours. They are wary of change and espouse discipline, are acquiescent, keeping to the rules and wanting a lead from authority. Prospectors want to acquire and display the symbols of success in everything they do. They want to make their lives better and be seen to succeed. They are a higher energy more fun seeking group. They are early adopters but not innovators, which involves social risk that they avoid. Pioneers are society’s scouts, testing and innovating, and always questioning. They are attracted not so much to signs of success but what is “interesting” including “issues”. Some of them are strongly ethical believing that to make the world a better place they must be better people. Others are more relaxed and holistic and some are into “doing their own thing”’. They are most at ease with change and most global in outlook of all the groups” (Rose and Dade, 2007).

This approach is used in planning behaviour change campaigns directed towards different audience types as for example, Pioneers might respond to a call to “think globally” while Settlers would respond negatively to such a message (Crompton, 2008). However, this approach seems only to have relevance for changing one behaviour at a time, rather than building social norms or values that promote environmental behaviours:

“The values-modes approach places particular emphasis on engaging Prospectors (outer-directed or esteem-driven individuals). This group is resistant to the traditional exhortations for behavioural change based upon environmental concern and moral imperative – approaches that may work better for Pioneers. Moreover, it is this group that includes some of the most voracious consumers” (Crompton, 2008: p. 21-22).

This kind of research demonstrates the importance of developing specific strategies and policy tools that do not necessarily target the entire population, but rather specific segments of it. Policy makers may find that some instruments work better for some groups of population, while other instruments work better with others. The idea of customising policy tools and packages for different segments is gaining momentum in environmental and sustainability policy. It has for example been demonstrated that segments of food are very different from segments in housing and people that would respond to certain measures to change their diets

¹² See e.g. (Empacher and Götzt, 2004)

(food domain) would require a totally different policy mix to change their mobility patterns (Schubert, 2004; Schultz and Stieß, 2007). In general it has been argued that lifestyles can be conceived as useful conceptual unit, through which social change can be considered and sustainable patterns of consumption motivated (Evans and Jackson, 2007).

In addition to classes and lifestyles, demographic and psychographic characteristics also affect the behaviour of consumers (section 3.3.3) and definitely have impact on sustainable consumption patterns. For example, *income* is one of the most important factors influencing sustainable consumption, with wealthier households more likely to purchase sustainable products (OECD, 2006d). On the other hand, they are perhaps the least likely group to drastically change their lifestyles through reduced consumption. Therefore, strategies for greening the markets might be more efficient when targeted towards upper classes or wealthier households. Low-income households could be reached by life cycle cost information. It is also important to consider the distributional impacts of measures in order to prevent unfair distribution of costs among different classes and income levels, and so subsidies or tax rebates for lower-income households might be considered.

Different *age groups* also show different sensitivity to sustainable consumption practices. For example, young people between the ages of 18 and 25 tend to be conscious about the need to reduce environmental impact, even though they may not always link it to their purchasing behaviour (OECD, 2008).

Gender differences have a very high influence on consumption patterns. Studies demonstrate that women globally live in a more sustainable way than men, leave a smaller ecological footprint and cause less climate change (Bradley, 2009; Johnsson-Latham, 2007). Women are more likely to be sustainable consumers, as they tend to buy ecological or organic food, have a higher tendency to recycle and place more value on efficient energy use, waste separation and recycling than men (OECD, 2008). Women are more likely to take social issues, such as child labour, into consideration, and they tend to have higher awareness about fair trade labels (Johnsson-Latham, 2007). A UK study found out that women are more concerned about climate change than men and they advocate changes in lifestyles and consumption behaviour, while men prefer technological solutions for mitigating climate changes (WEN, 2007). This also has deep implications for the types of strategies that can be developed to instigate changes to sustainable consumption.

In addition to demographic criteria, markets can be divided into various *product or service segments*, and also in accordance with various *segments of sustainable consumption practices*. As with different segments of consumption, segments of sustainable consumption behaviour may differ significantly depending on the type of sustainable consumption action that is being investigated. For example, people who are willing to separate waste and invest in energy efficiency lamps may not at all be willing to abandon the use of private car. They would be however more willing to buy an electric or a flexi-fuel car. And visa versa, there are certain segments of population that are much more price sensitive and therefore would be more willing to avoid using private car, than upgrade it to a more environmentally advanced model.

The consumption drivers and groups of consumers described in this report generally describe mainstream society - what 'most people' do; however there is a significant minority of people who think and act differently, and this is reflected in their consumption patterns and levels. For example, some people have strong values and behaviours around avoiding waste or being thrifty with resources; others may consume atypically due to environmental or social values, a desire to live more healthily both physically and mentally, or due to spiritual beliefs and practices (including simple living, donating a proportion of income to charity etc). Other people (including 'voluntary downshiffters') may prefer to work less and have more free time

to pursue their own interests, and therefore consume less as a result of their lowered income. Thus, besides classifying people in terms of segments of sustainable consumption practices, and taking into account recent findings of sociological studies that stress the importance of *shifting people values with regard to entire lifestyles*, it is important to understand what different lifestyle groups of people exist and what their role might be in shifting towards more sustainable lifestyles. An example of how different groups of people change their behaviour was provided by sociologist Amitai Etzioni who distinguished three groups of people that make lifestyle changes and everyday choices based on sustainability criteria (Etzioni, 1998): *downshifters* are the people who opt to reduce their income once they have reached a certain level of wealth. They typically choose to spend more time with their family, community or on pursuing personal interests. The second group are the so-called *strong simplifiers* – people who choose to quit their highly paid and high-status jobs to follow drastically simpler lifestyles. The third group is the most radical and comprises people who are truly dedicated to simple lives and gave this as their ethical vision guiding their everyday choices.

Recent research into the experiences of people with ‘sustainable lifestyles’ (whether the motivation is environmental or otherwise) show that many people find it extremely difficult to maintain their chosen lifestyle, as it is in direct opposition to the structures and norms of mainstream society (Evans and Abrahamse, 2008; Jackson, 2009). It is therefore important for policy makers to ensure that in order to encourage sustainable lifestyles of individuals the society actually enables them through provision of more sustainable infrastructure, sustainable technologies, through advertisement of more environmental and socially responsible products, through offering alternative means for people to display their status and signal their worth to society, e.g. through voluntary work, contribution to community development or through personal development.

Recognising the large diversity of people and consumers, their behaviours and choices is very important for policy makers who are devising policies affecting these people. Targeted research is therefore needed at the policy design stage to help direct specific policy tools towards the most responsive groups within the population, while developing other instruments and channels for reaching out to other segments of population.

5 Conclusions

Humanity finds itself in a state of great distress: environmental problems are escalating, disparities between people are widening and the ecosystem-services the Earth provides are diminishing. Technological solutions that were supposed to solve environmental problems are often outpaced by the increasing consumption levels of the growing minority of the world’s population belonging to the consumer society, who frenetically search for sources of new experiences, pleasures and joys. This paper attempted to describe the factors that influence consumer behaviour and consumption choices, and the relevance of these factors for instigating changes towards sustainable consumption.

“Sustainable consumption has emerged as one of the most challenging and vital policy debates of our time. The discourse around sustainable consumption has become a place where it is possible (perhaps even necessary) to address not just the technical and economic questions about the human appropriation of environmental resources, but deeper and broader questions about the nature of the ‘good life’ and the course of human progress” (Jackson, 2006b: p. 2).

In order to answer these difficult questions about the “good life” and the course of human progress, it is useful to try to understand the underlying reasons behind people’s behaviour in relation to consumption. This is especially important for policy makers devising

environmental and sustainability policies, since consumption levels and patterns seems to be a constant stumbling block for progress towards a sustainable society.

This study analysed a large number of forces that act at institutional and individual levels, which influence each other and affect the way people perceive themselves, their aspirations and how they undertake and react to changes that might be necessary for achieving a more sustainable society. One of the unsurprising conclusions is that understanding the forces that influence and shape consumption is an incredibly complicated task. Although consumption behaviour is complex, failure to address it may result in a failure to bring about the necessary changes in consumer behaviour and consumption patterns and levels.

Adopting more sustainable patterns of consumption is an important step, but is definitely not sufficient given the scale of change required to create sustainable consumption (Alfredsson, 2004). More fundamental systems-level changes are needed in order to reduce overall levels of material consumption. As suggested by Meadows, fundamental changes in society are needed, and the most effective leverage point is to transcend the current paradigm of economic growth and to change the mindset and value basis of society (Meadows, 1999).

“We will not significantly change the potentially unsustainable aspects of human activity unless we can develop an economic environment within which they are no longer attractive. In other words, we need to change the rules of the economic game so that it becomes economically rational to pursue sustainable alternatives” (Heal, 1998).

The importance of holistic perspective is also apparent when we consider how to promote sustainable consumption. The limits of the spill-over effect on sustainable behaviours and the limits of efficiency measures (as demonstrated by rebounds effects) make it necessary to target entire ways of life that are currently based on normalised unsustainable consumption, rather than focussing on changing individual behaviours. Similarly, a focus of many existing policy instruments at the individual level is misguided: social norms and values underlying mainstream society have the most significant impact on consumption behaviour, so policy intervention should take place at this level.

If the main goal of societal development, economic growth and infrastructure and business development is to create a healthy society with happy and satisfied people, then it seems that the current system pursuing GDP growth at any cost, is failing to deliver consistent improvements in well being and has thus failed on its own terms (Jackson, 2006b). Sociological and psychological studies demonstrate that in order to be happy, people need to have their basic needs satisfied, but it is equally important that their entire lives should not be spent in constant pursuit of material wealth; many examples indicate that when faced with conditions that allow people in the Western world to reassess their work-life balance, some people choose to work fewer hours for a reduced income.

There are already many useful policy interventions that are known to motivate more sustainable consumption, for example Ecological Tax Reform. Although many of these interventions are well known, governments may feel constrained in their ability to implement more radical reforms – reforms on the scale required by the environmental challenges faced – due to current lack of public support. Again, this leads to the conclusion that technical policy interventions alone may prove insufficient for society to achieve sustainable consumption patterns: a paradigm shift which redefines values and norms that underlie the way we choose to live might be necessary.

Understanding the complexity of human behaviour is important as it allows the development of a range of policies customised for different consumer groups and enables the selection of

policy packages that target different types of people and which may bring about the necessary societal changes.

Practice theory reminds us that although most people's consumption is unsustainable, this is not because people are ignorant or selfish – people are simply taking part in the normal practices of their society, in which ever increasing levels of material consumption are the norm. A minority of determined individuals and communities demonstrate the potential of what can be achieved even within the current socio-political context. However, research suggests that such attempts are constrained by the current infrastructure of society – regulations, economic policies, infrastructures and social norms. The result is that even those with the strongest motivations to live sustainably struggle with the entire unsustainable system in which they live and must interact with.

The efforts of those who practice alternative lifestyles can act as a source of inspiration and knowledge for the further understanding of the possibilities and benefits of lower material consumption levels, while simultaneously attaining higher satisfaction with life. They show that a wide variety of social groups and communities can be motivated to live more sustainability.

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