

CBL II Opportunities and Challenges of Sustainable Consumption in Central and Eastern Europe: Attitudes, Behaviour and Infrastructure

The case of Hungary

Emese Gulyás^a, Katalin Ujhelyi^b, Andrea Farsang^c, Zsolt Boda^d

^a*Corvinus University of Budapest & Association of Conscious Consumers, emese@tve.hu*

^b*Association of Conscious Consumers*

^c*Central European University Department of Environmental Sciences and Policy*

^d*Corvinus University of Budapest & Institute of Political Science, Hungarian Academy of Sciences*

1 Introduction

The study focuses on *individuals* and examines the attitudes, behaviour and infrastructure of household consumption with the focus on food, housing and mobility (tourism/transport) from a sustainability perspective. Our study is the first to draw a general picture about Hungary in this topic, and it is based on an original representative survey on sustainable consumption attitudes, the meta analysis of other surveys, analysis of statistical data from the Central Statistical Office (KSH) and other sources.

While overviewing a great number of studies and data, the study shed light to some of the contradictions a Hungary-like middle-income country might face. A way towards sustainable consumption should be found between traditions and modernization, between conflicting attitudes and changing infrastructure, under the conditions of triumphing globalization and shrinking local markets. The results and the recommendations might be interesting for other countries in the Central and Eastern European region as well.

2 Antecedents

Hungary is preparing its National Development Plan (NDP) which will define the ways the resources from the European Structural Funds will be used. One chapter of the NDP is the Environmental Operative Programme which, among other goals and as a new achievement, aims at focusing on sustainable consumption and production. As part of the NDP planning process, the Ministry of Environmental and Water invited the Association of

Conscious Consumers to prepare an analysis on the state of sustainable consumption and production in Hungary. The presented study is built on the results on this analysis and was compiled by the experts of the Association of Conscious Consumers who also work for other research institutions.

The Association of Conscious Consumers was founded in 2002 with the mission of “promoting and supporting conscious consumer behaviour, ethical (environmentally aware and socially responsible) consumption and corporate activity, sustainable consumption and production strategies, the eco-social market sensitiveness and awareness of rights and obligations of consumers.” The main areas of its activity are: independent information services, education, advocacy, consultation, publishing, events and media activities, international and national partnerships, research.

3 Methods, analytical framework

Studies dealing with sustainable consumption generally examine the following dimensions of individual consumption: *food consumption*, *housing* (construction and the consumption of energy, water etc. connected to the operation of households); *mobility*, and *tourism*, which recently has been handled separately due to its growing importance (e.g. EEA, 2005; Spangenberg and Lorek 2002; Sustainable Consumption Roundtable, 2006). According to the current research trends these consumption segments should indeed receive special attention because they represent a considerable weight in the ‘basket’ of individual consumers; their environmental impact is significant; and alternatives, which can be considered sustainable from both social and environmental aspects, are available on all of these areas. For these reasons we basically follow the above set consumption dimensions in our report, with some minor modifications. First, we do not consider mobility and tourism as separate topics, for very practical reasons. Tourism is still of a minor importance in the purchasing behaviour of Hungarians¹, on one hand. Though sustainable alternatives exist, these and the ecological effects of tourism are not present in the Hungarian public discourse, on the other. So we merged them to *mobility* in general. Second, before going into the details of the different consumption fields we start our report with the general trend of sustainable consumption.

For each field and, consumption in general, we present the available data about people’s *attitudes* towards sustainable consumption patterns, the underlying assumption being that positive attitudes are a necessary (although far not sufficient) condition for any behaviour change. Then we contrast the attitudes with observed *behaviour* and we provide data about the *infrastructure* of sustainable consumption patterns. However attitude formation can only be successful if alternatives necessary for behaviour change are available, and the institutional (e.g. legal) and physical infrastructure supporting alternative behaviour is also available.

¹ According to the data of the Hungarian Central Statistical Office, in 2003 people on average spent 7.9% of their income on „culture, recreation, entertainment”, out of which only a minor part should be assigned to spending related to tourism. For instance people spent only 1.8% of their income on package holidays. Total spending on tourism should be between the two, but certainly closer to 1.8%. This should then be compared to spending on food (25.5%), housekeeping and house maintenance (23.3%), transport and communication (17.8%). (KSH, 2005b).

The data we provide come from different sources. First, in 2005 we made a representative survey about people's attitudes towards ethical and sustainable consumption (referred as ACC, 2005). Second, we use data from other surveys² and studies. Third, we rely on official data coming from the Hungarian Central Statistical Office, publications of ministries and other government bodies.

4 General perceptions about consumption and responsibility

4.1 Attitudes, declared consumer behaviour

According to a survey from 2003, half of the population is aware that consumption has environmental impacts, 91 percent of the population agrees (to different extents) that consumption habits contribute to environmental problems, and it was only 6 percent who disagreed with the statement (Valkó, 2003). Similar opinion is reflected in a study from 2005 which shows that 71% agrees that almost everything that people do in modern life is harmful to the environment (HuMuSz, 2005). Economy in general is seen both as the solution and as the cause of environmental problems: 60-60 percent agreed with the statements that (1) economic growth is harmful to the environment in any case, and (2) economic growth is needed to solve environmental problems (HuMuSz, 2005).³

While three-quarters of the people share the view that we should return to a simpler lifestyle where there is less emphasis on consumption and economy, 27-30% agrees that instead of limiting the growth of consumption (changing lifestyle) technical development is necessary to live in harmony with nature, according to different researches (HuMuSz, 2005; Sági, 2004). Another interesting result is that while people recognise that their consumption patterns contribute to environmental problems, 40 percent of them place the responsibility onto the government for maintaining the environmental quality of the country (Valkó, 2003). However 51% are not willing to pay more taxes towards solutions for environmental problems (Sági, 2004). We can conclude that most people do not want changes in their personal lives, though they acknowledge the unsustainable nature of their present lifestyle models. It seems that unsustainable consumption and environmental problems remain someone else's problems. *These results reflect to the inconsistency of attitudes towards sustainability which - as we will see later – seems to be a general phenomenon.*

² Basic data about the frequently referred surveys, see details among the references.

Referred as	Year	Sample
ACC	2005	Representative to Hungary
Capital Research	2005	With reference to a representative survey
HuMuSz	2005	
Puckó	1999	
Sági	2004	Representative to Hungary
Valkó	2003	

³ In this survey people could choose several answers at the same time. So some respondents were apparently holding two mutually contradictory statement at the same time.

On the other hand analysing the results of different surveys we can find signs of people taking personal responsibility in cases where environmental problems are more visible, more connected to everyday life and the role of the person is much more obvious, for example, in the cases of selective waste collection or fast moving consumer goods (Valkó, 2003; Sági, 2004; ACC, 2005; Capital Research, 2005). We also have to mention that these are the subjects that have already been articulated by civil organisations or by environmental education. For example, there have been several NGO awareness-raising campaigns about the health effects of food additives, about the health and environmental effects of household chemicals or about cost and environmental benefits of selective waste collection.

4.1.1 Perceived role of the corporate sector

The spread of sustainable consumption and production can be a competitive advantage for progressive companies. Thus it is worth taking a look at if this progress is supported by marked demand. According to our survey (ACC, 2005) consumers also express their expectations towards companies, and – as a new phenomenon – beyond environmental aspects, different forms of corporate social responsibility are also becoming important.

The Association of Conscious Consumers conducted a representative survey about ethical consumer attitudes which also asked about expectations of corporate responsibility (in this context environmentally and socially aware business behaviour). Concerning attitudes, strong expectations are articulated and it seems that consumers are also conscious of their market roles: every second person (47%) agreed with the statement, that if consumers preferred the products of environmentally aware and socially responsible companies, those would make efforts to meet these expectations.

We also asked what kind of information would influence consumer choices beyond price and quality. The information whether the company has environmental management programs would be important for 83%, 40% of all consumers would be even willing to pay more for the product of a company with environmental program. A survey from 2003 (Valkó) presented similar results: 70% of people would like to get more information about environment-friendly characteristics of goods. This might be considered as a positive trend. Environmental reporting is important for 60% and 23% is willing to pay more for the products of a company that regularly reports about its environmental performance. The results suggest that there might be a significant market niche for the products of environmentally responsible companies if environmental management activities are supported by appropriate communication and products are accessible on the market.

The same is true of the social performance of companies: on the level of attitudes we can detect high expectations. Information about progressive employment practices (e.g. family-friendly workplace) would have a positive influence on the purchasing decisions of 78% of consumers, 36 % of whom would be ready to pay more for the products of such companies. Corporate support for local communities is important for the 69% of population and 30% is ready to pay more. A little bit more than half of the respondents, 56% states that information on good partnership between civil organisations, local governments and companies would be important when making consumer decisions, 20% would pay more for the products of companies in good partnership.

4.2 Consumer behaviour and its institutional and infrastructural framework

In the following we highlight some important trends that can facilitate or – from the other end – slow the progress of sustainable consumption in Hungary. These are general trends and conditions; we will provide more detailed information on consumption trends in the specific chapters.

Household consumption in Hungary grew faster than the GDP in the past years. While the phenomenon has its negative economic consequences as well (household savings declined and households largely contributed to the indebtedness of the country), the environmental effects of accelerating consumerism are unambiguously alarming. Though ecoefficiency has been improving – due to the decreasing environmental load of industry – it is likely to decline due to increasing per capita consumption.

Nevertheless consumption level is below the Western-European average in all dimensions from meat consumption to the number of automobiles. Therefore Hungary has a double advantage. On the one hand if the country manages to keep the present level of consumption (e.g., in terms of per capita energy) it does not have to face some of the problems that the rest of Western-Europe does in trying to reduce the environmental burden of high consumption. On the other hand we can already employ those solutions, alternatives, measures that were developed by Western countries (leapfrogging).

4.2.1 *Opportunities for sustainable consumption: promising trends*

In the past years or decade the institution of sustainable consumption is slowly improving. There are established institutions in the civil sector, in education and there are opportunities in public policies being planned or already in force. However, we must mention that in a majority of the following examples sustainable consumption is understood as environmentally sustainable while a holistic approach to sustainability is very rare.

More and more consumer protection and environmentalist *civil organisations* deal with the social and environmental effects of consumption. For example three years ago seven civil organisations founded the Ecological Consumer Protection Working Group which is a loose network to co-ordinate sustainable consumption projects and provide partnership opportunities; one of the major consumer protection organisations which publishes student diaries in co-operation with Generation Europe included sustainable consumption topics in the latest edition of the diary. Their activities also aim at increasing awareness concerning the sustainability aspects of consumption; several environmentalist NGOs specialised in different topics also deal with the consumption aspects of their fields of activity: for example civil organisations dealing with energy, genetic modification, transport, chemical usage etc..

A very important and basic condition is that *environmental education* has been present in the elementary and secondary education for several decades. For many years its focus was on biology and nature, but in recent years it has concentrated on a wider understanding of the environment, which is a good

opportunity to involve sustainable consumption. A few years ago, an education program for kindergartens and for primary schools was developed by the National Institute for Public Education (OKI, 2000).

It is also an advantage that the institutions of environmental education are quite developed; there are well established and high quality semi-governmental institutions (e.g. National Institute for Public Education), teacher partnerships, workshops (e.g. Körlánc Association for Environmental Education), even specialised communication forums and civil organisation-teachers partnerships. Unfortunately that is not the case with *consumer protection education* where sustainable consumption might also fit the curricula. The problem is that despite some promising initiatives regular consumer protection education is not embedded in curricula and is hardly working. Though teaching consumer protection is compulsory by law (CLV/1997), no one takes responsibility for this and organised teaching is rarely practiced.

In recent years sustainable consumption also started to filter into *public policies*. As we have already mentioned, sustainable consumption is going to be a part of the NDP and its Environmental Operative Programme. The Association of Conscious Consumers also makes – so far not successfully – efforts to involve sustainable consumption in the consumer protection strategy of Hungary. The National Environmental Protection Program (132/2003 OGY regulation) for 2003-2008 also mentions sustainable lifestyle among goals to promote. In 2004 the Ministry for Environment and Water announced its six focus areas, which included future-friendly production and consumption.

It is also an opportunity that in the *wider economic and political environment* of Hungary sustainable consumption is already embedded in public policies, e.g. in the UN Guidelines for Consumer Protection, in the AGENDA21, in the Sustainable Development Strategy of the European Union or the Sixth Environmental Action Programme of the European Union – just to mention a few examples.

4.2.2 Challenges for sustainable consumption: disadvantageous phenomena, trends

In the following we would like to highlight some general trends, which might challenge sustainable consumption in Hungary. These examples reflect to the general aspects of sustainability, exact sectoral data is presented later.

Ecological footprint

Among the challenges we have to mention the ecological footprint of the country, which is 3.6 global hectares per person, that is two times the productive 1.8 global hectares per person in 2001 (WWF, 2005). This means if everyone would consume like the average Hungarian does we would need another Planet (WWF, 2005), therefore we have to reduce consumption and/or considerably increase resource efficiency. The ecological footprint of Hungary is similar to some countries with the same socio-economic status (Poland 3.6, Slovakia 3.6, Slovenia 3.8), but lower than that of those countries which are being emulated by most Hungarians (e.g. Austria 4.6, Germany 4.8). On the other hand the ecological footprint of the country

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decreased between 1991 and 2001 by 10% (WWF, 2005), which is primarily due to economic decline, thus the trend is not likely to continue.

Growing consumption

Besides quality, the volume of consumption definitely affects sustainability.

According to household statistics (KSH, 2005b) in the past years private consumption in Hungary has been growing in almost all major fields with the exception of food. While the kg per capita food consumption has been decreasing, in the case of household durables, the number per 100 household of all statistically registered goods (except refrigerators) has been growing between 1993 and 2002 by 100-500%, in the case of cell phones, 84 times. The share of different household expenditures has also changed. In four major groups we could observe growth: maintenance of dwellings (+3.5%), health and personal care (+2.3%), transport and communication (+3.5%), culture, recreation and entertainment (+1%). These trends suggest that private consumption is shifting towards a more unsustainable nature.

Irresponsive corporate sector

While consumer expectations towards companies are well expressed at least on the level of attitudes, the environmental and responsibility culture of companies seems to be rather low according to some common measures used in developed countries. For example, companies only rarely provide information about their environmental and social achievements through channels regularly used by consumers (e.g. products, consumer magazines, databases, shops), and there are only few independent information platforms publishing such information. For example, around 1000 companies have ISO 14000 or EMAS qualification, but only 36 published environmental or sustainability reports in the past 10 years. Between 1996 and 2006 104 reports were published by 36 companies (KÖVET, 2006). We have similar phenomenon with the Hungarian eco-label scheme where in 2006 355 products were qualified by 33 companies. The diversity of the products is very poor: 28% of the products are plastic shopping bags, while 12% are freezers or refrigerators (www.kornyezetbarat-termek.hu).

5 Food

Examining *attitudes* to the sustainability aspects of food consumption, we focused on two major issues: organic products and genetic modification. While the first has obvious sustainability advantages, the sustainability of GMOs is at least questionable according to our present knowledge. Of course there are other relevant sustainability aspects of food consumption - for example packaging, local origin and transport, chemical treatment or food additives - but we chose to generalise these to fast moving consumer goods and described them in the following chapter.

In case of analysing *consumer behaviour and consumption measures* we also take a look at the consumption trends of some product groups where we could witness significant changes in recent years, for example the consumption of mineral water or the import of fruits and vegetables. We also introduce some progressive initiatives or sustainable traditions still alive, for example community-supported agriculture or production for self-sufficiency and the relative wide spread of farmers markets.

5.1 Attitudes, declared consumer behaviour

5.1.1 *Organic food*

A telling result is that according to different surveys, almost half (43-53%) of the population is interested in organic products. To 35% it is important whether a product is organic, (ACC, 2005; Capital Research, 2005), but only about 7-10% buys regularly (Sági, 2004; Capital Research, 2005), 34% buys rarely these goods (Capital Research, 2005). The data shows that 16% does not consume organic because of its higher price, while 12% does not purchase because organic products are not available for them (Sági, 2004) point to the need of infrastructural development which, by increasing supply, would lead to lower prices as well. In this case developing infrastructure (more organic markets, organic section in markets) could generate practically 100% market growth, compared to the current level. It is alarming - and suggests the need of further awareness-raising - that almost every third person (29%) agrees that the only thing that makes a difference between organic and regular products is that the first is more expensive (Capital Research, 2005). 46-60% of consumers does not take into consideration whether a product is “organic” (ACC, 2005, Capital Research, 2005)

5.1.2 *Genetic modification*

Similar to the rest of Europe (GfK, 2004), Hungarian consumers are sceptical of genetically modified food. According to a research 62% of the population are afraid of genetically modified food (Capital Research, 2005). As our survey shows 43% of the population takes into consideration whether the product is free from genetically modified ingredients. Among those who pay attention the information has high importance (an average of 4.48 out of 5) (ACC, 2005). Another survey measured 55% for the ratio of those who consider GMO-free feature important (Capital Research, 2005). Thus on the Hungarian market “GMO-free” can be a competitive advantage for companies or genetic modification can mean a huge market loss.

5.2 Consumer behaviour and its institutional and infrastructural framework

Due to the economic recession of the 1990s, the kg per capita food consumption in general decreased between 1993 and 2002, with the exception of dairy products where consumption more than doubled, and a slight 3-4% growth of bread consumption (KSH 2005b). However, in recent years the trend has possibly changed.

5.2.1 Opportunities for sustainable consumption: promising trends

Organic farming

Organic agriculture started in the 80s in Hungary and was characterized by a slow development due to the weakness of the domestic market. Today, the share of land under organic cultivation is around 2%, practiced on 128 690 hectares (Biokontroll, 2005). The size of the agricultural area managed organically has an annual growth rate of 12-20%. Due to the weakness of the domestic market, the majority (around 80-90%) (Mokry, 2001; AMC, 2003) of organic food produced in Hungary is for export and the production does not target to fulfil domestic market needs (Willer and Yuseffi, 2005); a substantial share of products available at shops are imported (Kovacs and Richter 2005). Although the market of organic goods in Hungary grew by 15-30% in 2003 and a growing demand is seen by experts for the domestic market (Richter and Kovacs, 2005), the level of organic sales still remains very low. One of the most significant reasons is the high price premium that is on average around 30-50% (Häring and Vairo, 2004). The estimated size of the Hungarian domestic market is about 10-20 million euros, the average consumer expenditure on organic food was around 2 euros per year in 2003 (FiBL survey 2004; Willer and Yuseffi, 2005). In the past decade the size of organic farming territories has grown ten times, but the ratio comparing to all agricultural land is still just half of the rate of the EU15 average (KSH, 2005f).

In comparison with crop production, organic animal husbandry has less importance, although its size is increasing; especially cattle and sheep farming have a significant role. Organic-poultry began to grow again after 2004 (Biokontroll 2002, 2003, 2004, 2005).

Besides good ecological conditions, the present eco-controlling system can be seen as a strength of Hungarian organic farming.

Markets, organic markets and self-sufficiency

Farmers markets and production for self sufficiency still present a significant source for private food consumption. These kinds of supply, by offering the possibility of direct shopping and consumption, shorten the distribution chain and have sustainability benefits.

In 2002 672 markets were operating in 488 locations (KSH, 2003b). Nowadays, these markets are slowly disappearing; the most obvious reason for this is the growing number of super- and hypermarkets (KSH, 2004). In 2005 5000 retail shops operated in market halls, that is about 3.3% of the total number of retail units. The majority of the shops sell food and they represent the 4% of all food shops. However the market significance of markets is decreasing, while in 2000 the net income of market retailers was about 140 million EUR, in 2002 it was 81 million, which is 1.2 and 0.6% of the income of all retail companies (KSH, 2003b). Despite their decreasing significance, farmers markets are still integral parts of purchasing culture and habits. In 2006 there are 13 periodically or continuously operating organic markets or regular markets with an organic section (Biokultúra, 2006).

Production for self-sufficiency still exists, though its ratio comparing to all household expenditures decreased from 8% to 4% between 1993 and 2002 (KSH, 2005b). However, we suspect that official statistics underestimate the size and significance of production for self-sufficiency:

some experts say that 40% of the vegetable and fruit consumption is coming from own or production, or is purchased in the neighbourhood, outside of official selling points and markets.⁴

Social aspects of agriculture

Community Supported Agriculture is only present in Hungary in some isolated cases. A small-scale pilot project has been running in Central Hungary, but it is also being reorganised and taken over. The NGO which used to run the project, called Open Garden Foundation (Nytott Kert Alapítvány), has operated a vegetable box scheme, built organic food communities, and also ran education projects and an organic garden for demonstration purposes. A similar initiative is run by Galgafarm: bio farming with the active involvement of local communities and consumers. The project which is supported by an education centre also aims at bringing social benefits to its neighbourhood by creating workplaces and by offering life alternatives to the youth (Tudatos Vásárló 9, 2006). Other initiatives are also present; there are more than dozen eco-villages in Hungary that promote sustainable lifestyles within complex solutions including housing, work and social problems (Vadovics 2006).

Fair Trade goods

Fair trade (FT) goods can be seen as symbols of extended consumer responsibility: paying attention and taking care of developing country workers' conditions. Therefore the market share of FT goods might be a good indicator of how open consumers are for the global social aspects of sustainability.

A country report made by Trialog (2005) sees the year 2005 as the starting point of the Hungarian Fair Trade movement, when Védegylet (Protect the Future), a Hungarian NGO organized an alternative festival, called Ökofeszt, in Budapest, which among other things introduced the principles of Fair Trade and give visitors the possibility to try Fair Trade products. In the same year the alliance of civil organisations interested in the promotion of Fair Trade products was formed (Fair Világ Méltányos Kereskedelem Szövetség, Fair World Fair Trade Alliance). Although data on importing organizations, points of sale, turnover, label licenses or market shares are not available yet, a growing interest can be seen both from non-governmental organizations (Krier, 2005) and few supermarkets as well, where Fair Trade products became part primarily of the coffee, tea and chocolate assortment. However the Fair Trade market is of minor importance – according to its market share. According to the estimation of the president of World Fair Trade Alliance, there are two supermarket chains in Budapest and around 12 organic food shops all around the country that sell Fair Trade goods; two coffee shops sell FT coffee in the capital. The yearly turnover of FT food sale is most possibly around 120 000 EUR. The most popular products are coffee, tea, chocolate, banana and dried fruits. The establishment of the first specialised FT shop has already been started.

⁴ Personal communication, Zoltán Szóts, Central European University.

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5.2.2 Challenges for sustainable consumption: disadvantageous phenomena, trends

Processed food

Soft drinks affect sustainability in several aspects: processing, transportation and post-consumer waste mean extra burden on the environment. According to market research data consumption of soft drinks increased between 1989 and 2003: an average adult drinks mineral water on three days per week, which is more than 100% growth during the observed period, the consumption of juices remained almost the same with 2.1 days per week, while the consumption of sparkling soft drinks increased to 1.8 days from 1.3 (GfK, 2003). The numbers - 92% of juices is sold in tetra-pack packaging, and only 1% of sparkling soft drinks has refundable packaging (HuMuSz, 20005) - refers to the environmental load behind the increasing soft drink consumption.

In 2002 the majority of the ten products that had most rapidly growing market shares were processed food. Among others: sandwich cream (43% growth), sausage (+29%), coffee cream (+16%), salted cookies (+12%), flavouring additives (+13%). According to the interpretation of the market research company, the phenomenon relates to accelerating lifestyles (GfK, 2002).

GMO

Food containing GMO have appeared on the shelves of shops in Hungary too. In 2004 Greenpeace in Hungary made an awareness-raising campaign after the GMO-labelling regulation went into force. The organisation asked about 500 retail and producer companies to make public statements about having their products GMO-free. According to their GMO-free booklet published in the same year, 7 out of 15 retail chains, and more than the 2/3 of producers claimed to be committed to GMO-free goods (Greenpeace, 2004).

Another promising direction, that environmentalist organisations, organic farmers and local governments started the "GMO-free area" movement in Hungary too. According to data by Friends of the Earth Hungary by 2006 more than 60 settlements and 300 private land owners have joined the movement (MTVSZ, 2006). These settlements commit themselves to offer GMO-free public services, to support GMO-free agriculture, follow-up GMO authorization processes and if possible make local relief against them and in its scope of action limit GMO crop harvesting

Fruits and vegetables

Based on different data sources we can assume that the consumption of local fresh products decreased against imported or processed food. The cultivation of 10 out of the 15 most important vegetables, and 4 out of the 11 most important fruits has been decreasing in the past 10 years (KHS-STADAT, 2006e; 2006f). The consumption of fruits and vegetables decreased by 36% between 1993 and 2003 (KSH, 2005b). The export of fruits and vegetables more than doubled between 2001 and 2005 while import grew by 39% (KSH, 2002; KSH, 2003; KSH, 2004c; KSH, 2005c; KSH, 2006).

Concentration of food trade

Besides the growing number of super- and hypermarkets, the number of economic organizations operating retail shops is decreasing year by year – operating concentration is progressively growing, the market share of independent small shops, which are not part of a chain, is rapidly decreasing (2003: 22%, 2005: 18%) (KSH, 2004; Orbán, 2004).

6 Housing

In this study we use the term “housing” as a general word for diverse functions of a modern home. Overviewing several survey results we faced the difficulty that many data which might be important for evaluating the sustainability of housing is not collected and measured by official statistics, for example domestic CO₂ emissions.

Concerning *attitudes* we could find data on waste, water and electricity consumption, but not on attitudes towards energy efficiency or renewable energies; there is no data on the usage of constructing materials or whether environmental aspects count in the selection of home. We have found data on attitudes towards fast moving consumer goods only in few cases: on local products, on natural products and data with limited reliability on attitudes towards household chemicals.

Analysing consumer *behaviour* and its institutional and infrastructural framework, we explored the trends of house constructions and the spread of electric household appliances, but we could not find data about the market share of more efficient products (for examples appliances in energy efficiency category A or higher). We also examined waste trends in cases of behaviour as well.

6.1 Attitudes, declared consumer behaviour

Despite the promising attitudes, declared consumer behaviour differs a lot. Our survey suggests (ACC, 2005) that about 63% of the respondents take into consideration environmental product features, while other surveys show that about 41-54% is ready to pay more; those who had participated in environmental education are more likely to prefer such products (Valkó, 2003). At the same time it is worrisome that only 18% of the people regularly buy eco-labelled products while some 30% states that it is not interested in “environmentally-friendly” labelled product (Sági, 2004). The fact that 57-60% claims that it only seldom meets such products (Valkó, 2003) points to the need of infrastructure development.

6.1.1 Energy and water

For a significant majority of people wasting energy or water means wasting money; in both cases the number of those who think that saving is an environmentally beneficial behaviour is less than 10% (Puczkó, 1999). This suggests that awareness-raising should concentrate on the fact that saving energy and water is beneficial in both financial and environmental grounds.

We do not know much about the attitudes toward energy efficiency or related consumer behaviour, but according to survey results 53% of

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consumers often or seldom buys energy-saving light bulbs and 13% does not purchase such products, because they are expensive (Sági, 2004).

6.1.2 Waste

In this case we intended to explore the attitudes towards both prevention and post-consumption waste management. For prevention attitudes we could find information on packaging choices.

The relevant researches show that it is only 19% of consumers who think that preferring recyclable packaging means less burden on the environment (Puczkó, 1999), while half of the consumers does not care about if the packaging is refundable (ACC, 2005), about 30% of the respondents always examine whether the food has environmentally friendly packaging (Capital Research, 2005), 36% looks for refundable packaging (Sági, 2004). It is likely that due to the current market situation (small refundable packaging supply) and the declining market share of products in refundable packages these consumers can not satisfy such needs. There is a need for facilitating and enhancing communication between stakeholders and market actors, and at the same time developing the infrastructure (e.g. refunding system).

People's perception about the correlation between selective waste collection and the environmental quality is rather positive: 44% of the population thinks that selective waste collection puts less burden on the environment (Puczkó, 1999). When people were asked about their first idea concerning environmental or nature protection activities, 38% spontaneously mentioned selective waste collection, in case of guided questions 66% mentioned it and it was the fourth most frequently mentioned idea (HuMuSz, 2005). These are promising results on the one hand, though we have to remember that in many countries where selective waste collection has been practiced for several years, the actual volume of waste has not declined (Eurostat, 2006).

Talking about waste management and responsibilities 44% of the population agreed that the solution of the waste problem caused by packaging, or the success of selective waste collection (41%) depends on individual efforts (HuMuSz, 2005).

The results concerning recyclable packaging and selective waste collection from the survey of Puczkó (1999) suggest that the idea of preventive environmental protection is less understood and probably less practiced.

6.1.3 Natural products and healing

As already mentioned, there have been several awareness-raising campaigns in Hungary on artificial food additives and potentially harmful household chemicals in recent years. Therefore we assumed that people are more open to natural products or products with natural ingredients.

There are very receptive attitudes toward more natural products. 74% of consumers finds it important that the product does not contain artificial ingredients (Capital Research, 2005), according to our survey 60% of the population takes into consideration if the product is free from additives or synthetic colouring (ACC, 2005).

48% expressed interest in natural healing and already tried such methods; the same percent of the people agrees that health politics should take natural healing more seriously (Sági, 2004).

The highly represented positive attitudes to natural products suggest that there might be a fair market niche for such goods. Presumably this demand is currently not satisfied; therefore it would be advantageous to focus on infrastructure building and information flow instead of awareness raising.

6.1.4 Household chemicals

We could not find representative surveys about attitudes towards household chemicals, but there was one survey among young intellectuals in bigger cities conducted by a civil organisation. Despite the limitations of this research we think that the results are interesting and can be taken as an upper estimation about the attitudes towards household chemicals.

Almost everyone (96%) agreed that frequently used chemicals carry health risks. Answering close-end questions PVC (84%), air fresheners (83%), fresh fruits and vegetables (65%), ozone (75%) was believed to be risky to the health (LMCS, 2006).

6.1.5 Local products

Besides being beneficial to national economies, consuming local products undoubtedly has sustainability advantages. Consuming local products means less transportation-related carbon dioxide emission and therefore less contribution to global climate change; food safety, health and environmental risks are easier to manage – just to mention a few examples.

Local, Hungarian products are important for a significant majority. According to different surveys, 63-82% of consumers find important the information whether the product was made in Hungary (Capital Research, 2005, ACC, 2005), a fair number, 54% of them is also willing to pay more for them (ACC, 2005). 40% of the population also thinks that local companies are better in meeting consumer demand than multinationals (Sági, 2004). Since the word “Hungarian” or “local” are catch words for consumers, further support and promotions also stressing environmental benefits might be recommended. Supporting the “local” is such a strong attitude that it is worth linking other messages to it when promoting sustainable consumption.

In general we can conclude that the awareness of sustainability aspects is alarmingly low in those fields where the effects of consumption appear in a distant time or space, for example in the case of energy, transportation or water consumption.

6.2 Consumer behaviour and its institutional and infrastructural framework

6.2.1 *Challenges for sustainable consumption: disadvantageous phenomena, trends*

Number of households

The number of households – as a basic consumption unit – can predict general consumption trends. Following the millennium the number of households began to increase again and in 2005 the number of households reached 4 million. The number and share of one-person households increased considerably, reaching 29% in 2005, which means that almost every third household consists of only one person (KSH, 2005d). The reasons for the growing number of single-person households might be the following: degrading age structure of the population, growing number of single elderly, growing number of housing stock and simultaneously decreasing number of the population. The rising demand of youngsters to become independent and the separation of generations also contributed to the fragmentation of households. The average household size decreased from 3.1 persons in 1960 to 2.47 persons in 2005 (KSH, 2005d).

The number of new-built homes, their area, as well as the ratio of new house buildings per 1000 person grew rapidly, between 1991 and 2004 the latter increased by 30%. From 2000 the number of commissioned homes grew by at least 10% every year and the rate of small flats or houses increased considerably as well (KSH, 2005d).

The rate of new flats within the overall flat building grew from 10% to 40% in five years, and the importance of the agglomeration grew as well – 70% of new flats were built in agglomeration areas of bigger cities (KSH, 2005d), which means growing personal transport due to growing distance between workplace and home, for example, in the agglomeration of Budapest (Studio Metropolitana, 2001). These housing and construction trends put an increasing burden on the environment both on land use and on the use of natural resources such as increasing electricity consumption.

Consumer durables

Besides the growing number of one-person households, the number and variety of durable consumer goods in households is increasing as well. In addition to the growing number of these goods, household appliances with new functions have also appeared (KSH, 2005b), the majority of households is equipped with more and more electric devices. The number of refrigerators, freezers and CD players more than doubled, the number of video cameras and microwave ovens and computers grew by cca. 300%, the number of mobile phones grew extremely 84 times between 1993 and 2003 (KSH, 2005b). While the number of devices bought and used in homes – e.g. television, computer, hi-fi, kitchen machines and mobile telephones – is increasing (KSH 2005b), their life-cycle is becoming shorter. This data might not be alarming or new to Western-European readers, but one of the sustainability advantages of Hungary originated in its relatively “low” development, thus for example relatively low household energy consumption due to the low spread of electrical devices.

While the energy-efficiency of household/kitchen devices is improving, the total energy consumption of households is not decreasing due to the growing number of electrical products (Eurostat, 2006).

Waste

The quantity of waste (municipal, electric and packaging) continued growing – between 2000 and 2004 the increase of municipal waste quantity was on average 3,5% every year, of which more than 80% gets to waste deposits (Eurostat, 2006). According to the estimations of a comprehensive study on waste management in Hungary, the volume of residential waste had also been growing by 2-3% per year up to 2005 (HuMuSz, 2005). Building and demolition debris and electric waste represent a considerable share in waste quantity increase. With the growing number of electronic devices and computers an increase is expected in the quantity of electric waste as well. In Hungary 70 million tones of waste is generated yearly, 4.8 million of that was municipal solid waste in 2005, the per capita amount was 506 kg in 2004 (Persányi, 2005).

Energy

According to a survey carried out in 1996, heating accounted for most energy consumption per dwelling; its share was around 70%, followed by cooking that accounted for 14.9%, water heating for 11%, electric appliances and lightning for 3.8% (Elek and Nagy, 2004).

Widely accessible government programmes promoting household energy-efficiency and energy-saving (for example the National Energy Saving Program for the residential sector that started in 2000) and those supporting the spread of household usage of renewable energy sources were stopped or operated very limitedly in the last few years. In many cases legal regulations are not supportive, rather making the spread of more sustainable technologies (e.g. reed-bed sewage treatment) more difficult. Legal regulations also make it more difficult to use traditional building methods (e.g. loam houses) and to reuse building materials.

6.2.2 Opportunities for sustainable consumption: promising trends

Waste

Positive results are shown concerning the general willingness to selectively collect waste and the service is also available for almost half of the entire population. According to data collected by the Central Statistical Office and the Ministry of Environment and Water, in 2000 15kg/person was collected separately, this number grew to 49,6 kg/person for 2005 (Persányi, 2005). Almost 4000 selective collection points have been established – reaching 4,5 million people. According to the plans of the responsible ministry, in the coming years the infrastructure is going to reach the whole population. (Persányi, 2005).

Energy efficiency

The quality of newly built houses remarkably improved according to West-European and Hungarian studies, especially in the field of energy efficiency due to better insulation and energy-efficient heating equipment (Elek and Nagy, 2004; Rijkens-Klomp and Lieshout, 2004).

The long time awaited regulation was announced for the energy efficiency certification of dwellings. According to the new regulation the energy measures of buildings should be measured and categorised. As the first step, the new certification process should be applied for the dwellings built after the 1st of September 2006 (7/2006. (V. 24.) TNM regulation). Since the regulation is very new yet there are no experiences with its effectiveness, nevertheless the institutions are slowly building. For example the Hungarian Association of Energy Auditors was founded (Zöldtech, 2006) and the energy auditor education has already started at the major technical university (BME, 2006).

Water

Per capita water consumption reduced by 50% in the 1990s mainly due to the decrease of water use for domestic and watering purposes. During the same period (1992-2000) water prices grew six times while sewage fees grew eight times more than the changes of the consumer price index (430%) (KSH, 2005b), which possibly also contributed to decreased use. As real income increased in the last few years, household water consumption started to grow again and that is also true of the poorest households (Boda et al, 2006).

Community usage, lending

Community usage might be a solution for growing individual consumption, for example car or bicycle sharing systems proved to be successful in several European cities (HuMuSz, 2005b). Unfortunately these forms have negative historical connotations in Hungary and therefore they might not be popular in future. On the other hand similar institutions are slightly developing. In 2003 there were more than 3000 lending points in the country 3.6% more than in the previous year, and 12.2% more than three years before. About 40% of the lending points deal with entertainment, 10% with wedding clothes, 4-4% with machines and sport facilities, 11% with vehicles (KSH, 2004b).

7 7 Mobility: Transport and tourism

There is a lack of information on attitudes towards the sustainability aspects and on the environmental effects of tourism in Hungary. Based on the presumption that the majority of environmental loads of tourism derive from mobility we merged the two categories and focused on this aspect.

7.1 Attitudes, declared consumer behaviour

As we have already mentioned we could not find comprehensive researches about the relevant aspects of transport and tourism, but the partial results of the surveys introduced below are still telling.

7.1.1 Transportation: perceptions about pollution

The evaluation of the sustainability aspects of the different modes of transport suggests that formal or civil environmental education should concentrate more on this topic. Only 6% of the population is aware that *airplanes* cause huge environmental damages, while 28% thinks that airplanes do not pollute at all (!) (Puckó, 1999).

64% of the population regularly *walks* (Sági, 2004), possibly complementary to other modes of transport. While 30% of the population regularly rides *bicycles*, 68% of the population never or only seldom do so (Sági, 2004). On the other hand according to a survey of Magyar Turizmus Rt. 43% of the adult population and half of the population under 25 is interested in bicycle riding (Magyar Turizmus Bulletin, é.n.).

Almost half on the people (44%) uses *public transport* (Sági, 2004). According to 57% of the population *buses* are extremely polluting, to another 24% moderately polluting, 1% thinks that they are not polluting. 37% says that *cars* are only moderate polluters. Only one third (29%) of the population thinks that it is less environmental burdening if they take care of how often they use their car (Puczkó, 1999). 27% travels by car alone, 40% travels in shared cars. 43% of the population would not be willing to pay more for petrol; even if they were assured that the surplus is assigned for environment protection (Sági, 2004). On the other hand 66% of the respondents mentioned air pollution caused by car to be the most serious environmental problem (HuMuSz, 2005). The controversial results highlight again that the knowledge about sustainability and the preferences of people are not coherent, and that we are more able to evaluate environmental problems close to our everyday life (e.g. air pollution is a very visible and significant problem for the urban majority); time effect can be also a possible but in our views week explanation.

7.1.2 Preferring cars

According to the Institute of Transport Sciences the three most frequently mentioned aspects of choosing between different transportation modes are punctuality (36%), quality (22%) and low prices (21%) (KTI, é.n.). These priorities might explain the spreading of car usage against common transport.

Due to the lack of detailed information it is only presumable that people are hardly aware of the environmental effects of tourism. According to a survey conducted among the population around Lake Balaton, one of the most popular tourist destinations, 40% of tourists would never change car to public transport and 27% of tourists would do so in case of more favourable timetables. The same survey showed that 82% of tourists around Lake Balaton travel by their own car and only 11% uses railway (Puczkó, 1999), though railway services are available around the lake.

7.1.3 Consequences of growing tourism

The majority of people expect positive changes from the development of tourism: economic advancement of the country or the settlements, development of the society and modernisation. On the other hand among negative consequences crowd and noise are mentioned on the first place (28% agreed), and increasing criminality on the second place (23%). Only 19% agreed that growing tourism means growing pollution, and another 19% agreed that street order would decline (Szonda Ipsos, 2000). These results suggest that the overwhelming majority of people do not consider tourism as an environmentally disadvantageous activity.

7.1.4 A chance for eco-tourism

According to a survey on holiday habits, most of the respondents think that the natural values of the destination influence tourist choices the most

(4.31 score out of 5), besides cultural and architectural values. (Szonda Ipsos, 2000)

28% chooses destination because of the natural features of the place; when inland tourists were asked about their satisfaction with the different aspects of their yearly main travels the “natural environment” was scored to 4.69 out of 5, right after hospitality on the first place (4.71) (Turizmus Bulletin, 2004)

7.2 Consumer behaviour and its institutional and infrastructural framework

Transport is heavily dependent on fossil fuels and has a significant contribution to CO₂ emissions and air pollutants. In the transport sector CO₂ emissions grew by 1.3% on average annually, due to the shift from rail to road transport; further increase can be expected since road transport is the fastest growing segment of transport. Energy consumption by rail has decreased from the 90s, but energy consumption by aviation has continuously been increasing (Elek and Nagy, 2004)

7.2.1 *Challenges for sustainable consumption: disadvantageous phenomena, trends*

The major challenge for the sustainability of mobility is the continuously growing trend of the number of cars, car usage and its growing share from transportation against public transport.

Car ownership and usage

In 2003 47.5% of households had passenger cars, in 2004 48.3%: the rate was 64.6% in the case of active households and 23.2% in the case of pensioners (KSH, 2005b). The number of passenger cars also increased by 12% between 2002 and the first half of 2006 (KSH-STADAT, 2006d). The average age of passenger cars improved slowly in the last few years from 11.7 years in 2002 to 10.4 in 2006 (KSH-STADAT, 2006c), which also means that the lifecycles of cars decreased.

After 90's the energy consumption of passenger and freight transportation increased and individual transport gained ground against public transport, increasing railway and bus fares in passenger transport made the use of passenger cars more competitive (REC, 2003; Elek and Nagy, 2004).

Shopping is done by car in an increasing number, in the first half of 2005 19% of shopping was arranged by car, which covers 38% of the total purchase value. The same data in 2003: 16% and 34%. (GfK, 2005). According to a survey on tourism habits, 71% of inland tourist used cars to reach their destinations, while only 17% used railway (Turizmus Bulletin, 2004).

Travelling with public transport

The situation of public transport in cities where the infrastructure is well developed - therefore there is a real choice opportunity to consumers - can reflect to and predict the general situation. According to the yearly reports of the Budapest Public Transport Company, the number of citizens using public transport decreased by 9%: from 1.529 billion in 1994 to 1.398 in 2003 (BKV, 1998; BKV 2003).

We can detect similar changes for the country as a whole as well. The number of people travelling with public transport for long-distance destinations decreased by 5% in average from 2002, in case of buses and train the decrease was 5% in the case of ship 35%, while travelling with airplane doubled from 2.2. million in 2002 people to 5 in 2005 (KSH-STADAT, 2006a). The number of people travelling with local public transport decreased by 6.6% between 2002 and 2005; metro and suburban trains lost more than 9% of their customers, while the number of customers did not increased at either mode of transport (KSH-STADAT, 2006b).

7.2.2 Opportunities for sustainable consumption: promising trends

Alternative modes of transport

According to estimations of the Ministry of Economy and Transport, currently only 1500 km bicycle roads exist, but according to the plans in 10 years another 5000 km will be built. In 2006 the Ministry of Economy and Transport announced prizes for establishing “Bicycle-friendly workplaces” and “Bicycle-friendly Settlement” that might contribute to the growing popularity of bicycle riding. At the same time it must be noted that according to the Western-European experiences people choose bicycle riding instead of public transport and not instead of cars, which means that in itself the spread of bicycle riding in towns only moderately decreases car traffic.

In Hungary there is still a strong tradition of public transport use, its network is well-developed. Although public transport (bus, train, underground railway and suburban railway) has become less attractive during the 90s, it still represents the majority of total passenger trips, the modal split is around 60% for public transport and 40% for passenger car use (see e.g. REC, 2003).

Tourism, ecotourism, village tourism

A large part of the Hungarian population is not participating yet in tourism activities. Thus it is a good opportunity to seize the moment and concentrate on developing more sustainable alternatives. This opportunity seems to be gaining ground.

In the last few years the number of Hungarians travelling abroad by airplane grew radically (10-17% every year) (KSH, 2005g), but travelling abroad in general still accounts for a minor (about 10%) part of tourism (MTR, 2004; Szonda Ipsos, 2000). Nevertheless we have to notice that – mainly due to financial shortage – around 70% of the population does not participate in tourism, neither inland nor abroad (Szonda Ipsos, 2000; KSH, 2006b). About 90% of those who travelled chose inland destinations in 2004 (MTR, 2004).

In case of eco-tourism growing interest and importance can be seen both in policy arena and the practice. It became an important part of the National Strategy on Tourism Development for 2005-2013 and in line with it the Ministry of Environment and Water drawn up the National Eco-tourism Concept last year and some sectoral researches emphasised the opportunities and advantageous features of the country.

There are 10 national parks in Hungary which already became destinations of eco-tourism, and the law on nature protection from 1996 also emphasises the role of national parks in tourism. On the other hand all the parks progress in this field and have employees for developing and

managing eco-tourism activities. According to the data of national parks the number of eco-tourism visitors grew between 1999 and 2002. The number of visitors of the most popular parks was between 170-220 000 (Michalkó, n.a.)

We can witness the same positive trends in village tourism. Since 1988 the number of guest nights in domestic village tourism increased by 80% (against the 23% growth of domestic tourism) and accommodation capacities increased by about 70%. On the basis of the guest nights rural tourism is responsible for 4% of the total domestic tourism (KSH, 2005g).

8 Conclusion

A short conclusion about sustainable consumption in Hungary could be that the situation is comparatively worse concerning available alternatives and supporting infrastructure than concerning attitudes and awareness.

8.1 Green, but not consistent attitudes

Our survey and similar ones show that the Hungarian is surprisingly “green” in her attitudes.

At the same time the fact that on *the general level the* majority of people show *positive attitudes* towards sustainable consumption does *not* necessarily mean that they are *informed* or aware of certain aspects of sustainability. That is, education and information spreading is still needed.

Positive attitudes do not mean either that people indeed *act* according to them. Usually there is a gap between claimed attitudes and behaviour, but in Hungary – if it is possible – this gap is even greater. For example there is a huge gap between those who – according to their declaration – buy organic products regularly and the estimated size of the “organic” market.

While the infrastructural conditions of sustainable lifestyles are very weak or missing in most of the sectors, the majority of respondents are conscious of environmental problems deriving from consumption, and, in general, open to sustainable alternatives. Survey results show for example that the majority agrees with the necessity of moderating consumption and living simpler in order to reduce environmental problems, but people are not ready to change their lifestyles. These attitudes are obviously not consistent, and they are also surprisingly unevenly distributed among the different sectors. For example some major environmental problems associated with travel and tourism are almost unknown to Hungarians. Furthermore, consumers have serious difficulties with understanding the global effects of consumption, which are far from their neighbourhood.

However, we can conclude that in general respondents show positive attitudes towards sustainable consumption alternatives, and in some cases they are also willing to make *certain* changes in their consumer habits.

8.2 Need for further awareness-raising

Often there is a lack of information about the opportunities to change or available alternatives. Awareness-raising and education on sustainable consumption still have a great role; these should focus on facts, the details of problems and alternatives for solving them.

Concerning awareness raising, it is a well-known phenomenon from Western-Europe that environmental protection for many people – regarding their own lives and lifestyle – is associated exclusively with selective waste collection (in other words, they do not see the casual relationship between their energy consumption, car usage and climate change, or the health and environmental effects of household chemicals). People think that if they collect waste selectively they would have done their part. In Hungary a similar phenomenon also exists: 80% of Hungarians considers selective waste collection important from the perspective of environmental protection (HuMuSz, 2005). Hopefully the trap might be avoided if different “green” household practices are popularised with the same intensity.

International and Hungarian researches and surveys suggest that civil organisations might be one of the most effective actors of awareness raising: people trust civil organisations to the greatest extent (in this respect the state and companies fall far behind civil organisations (see e.g. SustainAbility, 2003).

8.3 Developing institutional and infrastructural framework

Examining consumption patterns we found that in many respects Hungary is on the same, or even better level of sustainability compared to some well-developed EU member states. The ecological footprint of Hungary is lower than that of most Western European countries. This is due to a lower level of development and consumption and the survival of certain traditional consumer and lifestyle models. For example behaviours as bicycle riding or re-usage are mainly coming from “shortage economy” before the 1990s, but are still popular in the country side.

Trends regarding the volume, the structure or the related environmental damages of consumption are less favourable. In this perspective it is worrisome that the conditions of sustainable consumption are weakly or not supported by the legal system and government policies, furthermore its infrastructure is underdeveloped in many cases. In certain fields (e.g. transport, household energy consumption) no remarkable efforts have been made to change consumption patterns.

In Hungary, initiatives providing community support for alternative consumption in some fields are more or less developed (e.g. eco-villages), while other forms (e.g. consumer cooperatives) cannot be found or have just started their operation. Supporting these initiatives is not only advantageous for their direct stakeholders but their multiplying effect and demonstrative nature might be remarkable as well.

We have to take into consideration that awareness-raising can only be successful if alternatives are available and supported by appropriate (e.g. legal) institutions and infrastructure. If the conditions change the behaviour of people will change as well.

8.4 The role of the government

To make consumption more sustainable, an exemplary conduct by the state is essential. If hybrid cars, energy-saving bulbs and selective waste collection for recycling are not present at state organisations and in the buildings of local authorities why should one have these at home?

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In our study we could not evaluate in detail the government programmes which aim at promoting sustainable consumer patterns. However, our general impression, supported by some evidence, is that the government in Hungary should be much more pro-active in supporting, promoting, popularizing sustainable consumption alternatives. There are some areas (e.g. spreading renewable energy use, like solar collectors, in households) where currently no effective government programme or initiative exists. Or even if a sustainability programme is launched, there is always a threat that for budgetary or other reasons it can be stopped at any moment – sustainability policies being formulated at the margins of public policy. Government procurement procedures do not incorporate principles or aspects of sustainability. There are some problem areas (e.g. small-scale, alternative sewage treatment, the use traditional construction materials etc.) legal and institutional barriers make impossible the spread of more sustainable alternatives.

Through the proper revision of legal regulations, consistent programmes (which are not changing unpredictably), the support of civil and company initiatives and the development of physical infrastructure the government should contribute more to the establishment of those conditions without which the spread of sustainable consumption patterns are not expected. In many cases at least temporary state support is indispensable to make more sustainable products generally available. This obviously needs resources, but we should not forget that opportunities for win-win solutions do exist, and in this case promoting environmentally and socially sustainable alternatives can yield short-term economic benefits as well.

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