Chapter 5

THE STUBBORN CONSUMER

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5.1 Introduction

Environmental effects resulting from production and consumption are closely linked. An increasing level of prosperity, shifts in consumer patterns, and the alleged power of the consumer through the market brings the role of civil society into the picture in the transition to a sustainable society. The role of consumers and their organisations can – by way of an articulated demand for products with a lower environmental load – be a significant motive for manufacturers to accept the extended co-responsibility described in the previous chapter. Looked at from this point of view it is relevant to find out which trends are taking place in consumer behaviour, and what are the environmental consequences of those trends. It is also interesting to analyse how the interaction between market and civil society in this field takes shape, and what role is and can played by the state to influence consumer behaviour.

The growth in prosperity in the West brings a more normative question into the picture. In the Declaration of Rio, Agenda 21 dating from 1992, the United Nations called upon all states to impose restrictions on and to eliminate non-sustainable methods of production and consumer patterns. This, it was stated, was due to the fact that while there is an exceptionally high level of consumption and non-sustainable consumer patterns in the wealthier parts of the world, there is still a large section of mankind that is withheld from the most elementary consumer needs (UN Conference on the Environment and Development, 1992, pp. 8, 42-49). Reasoning from this perspective, the UN brought the question of the environment and

consumption into the context of international justice and solidarity. In doing so, the world's highest administrative body took an enormous step forward, a step not often taken at the level of the individual states. The question is in how far can this normative approach be brought into practice and what is the role civil society can play therein.

This chapter deals with the conscious attempts to reduce the environmental load caused by consumption. First, we take a look at the environmental effects of consumption, setting out a brief analysis of the various consumer patterns and look at the aspect of 'over-consumption'. We then take a look at the role of the state and discuss the effects of the policy pursued in this respect. Subsequently, we deal with the question of what can be expected from calls to change consumer patterns and values and discuss developments in the division of roles between the market, the state and civil society. We conclude by looking at the possibilities of influencing consumer behaviour.

5.2 The consumer's share in environmental degradation

Consumption and consumer patterns have only recently been given serious thought in environmental policy. We can regard this recent attention mainly as a reaction to the observed stubbornness of existing consumer patterns. Changes easy to achieve in environmentally relevant behaviour (such as separating waste, saving energy and water, which does not cost money, the latter two can even save money) have to a large extent been realised in the Netherlands. A substantial change in behaviour in these fields has been observed. The separation and re-processing waste is a success. Water consumption per capita is stabilising after having risen for some years in line with the growth in prosperity. What remains are environmentally relevant consumer patterns that are at the expense of comfort, status and luxury, or seem inevitable and consequently difficult to change. To what extent do these attitudes contribute towards the environmental problems? Table 5.1 shows that the environmental load in terms of themes such as climate change, acidification and waste is only a fraction of the total environmental load in the Netherlands. In other fields, the share of consumption in the total environmental load is much greater, sometimes because a 'major clean-up' has been held in industry.

The above figures relate to the environmental load generated in the use stage and the load that arises when the associated waste is removed. However, we must point out here that these figures only give a limited picture of the environmental impact that results from consumption. We obtain a much better picture if the environmental load is taken into

	consumer's share in the total national emission		development in the total consumer's emissions
	1990	1999	1990 – 1999
greenhouse gases	10%	9%	- 2%
acidifying agents	3%	4%	- 1%
organic compounds:			
- benzene	6%	8%	- 26%
- fluoranthene	18%	19%	- 32%
- benzo(a)pyrene	28%	61%	- 21%
- dioxin (excl. incinerators)	5%	71%	- 19%
eutrophication (N-total)	65%	68%	+ 9%
eutrophication (P-total)	30%	55%	+ 9%
waste produced	12%	15%	+ 34%
- recycled waste	3%	9%	+ 278%
- non-recycled waste	27%	34%	- 12%

Table 5.1 The consumers' share in the total national environmental load in the Netherlands 1990-1999 and the development in the total consumers' share (% of total for several emissions) (National Institute of Public Health and the Environment, 2000).

consideration throughout the entire life cycle of the goods consumed. Individual life cycle analyses and studies into the *indirect* energy consumption, or how goods make use of the environment, show quite clearly that a far greater claim is made on the environment. Studies conducted by Vringer et al., (1997) show, for instance, that the indirect energy demand (i.e. the energy required to produce and transport consumer goods) is more than half of the total energy demand. More than two thirds of the total direct and indirect energy consumption is swallowed up by activities that relate to housing (39%) and caring activities (nutrition, care and clothing: 30%). The activities that 'make life pleasant' (recreational activities such as sport, amusement, development, etc.) make up for 18% of energy consumption. And last of all, transport takes up a considerable share, standing at 13%.

These figures only relate to energy and relate to random figures at a given moment in time. Over the last few decades we have seen a steady growth in household consumption in the Netherlands (measured in the total amount of Euros spent): over the past two decades this averaged an annual 1.75% and the growth was relatively high in the second half of the last decade of the 20th Century: 6%.

Not only consumption per capita or per household increased, the size of the population is also on the increase by about 0.7% per annum. Around the turn of the century we welcomed the six billionth inhabitant of Earth, and the 16 millionth inhabitant of the Netherlands. In the course of the 21st Century the population of the Netherlands is expected to stabilise at 17 million. This Dutch population is, however, starting to live in smaller households. The average thinning out of households over the previous decade was 1.6% per annum.

Such figures on more inhabitants, smaller households, increasing consumer expenditure, say very little in themselves on the actual size of the environmental load. The extent of improvement in environmental performance of consumed goods is also important. An attempt was recently made to estimate the effect of developments in the field of demography, behaviour, prosperity and cleaner technology. These analyses show that technological developments in the period 1985-1997 have led to a 15% reduction in the total indirect and direct energy demand of households. Conversely, there is a 9% increase due to population growth, an increase of 4% because of the smaller households, an increase of 9% due to the rise in income and, last but not least, an increase as high as 18% as a result of behavioural trends (National Institute of Public Health and the Environment, 1998).

Technological environmental improvements are occasionally counteracted by gradual changes in behaviour. One example in this respect is the change in how we do our laundry. Improvements in detergents and in washing machines have made it possible to wash at lower temperatures and thus achieve a considerable saving in energy. This saving has almost been negated by to the fact that Dutch people have gradually started to wash more items with a higher frequency over the past few decades. The total energy consumption for laundry purposes has remained stable (Slob et al., 1996).

A long-term foresight study into the use of energy for consumption purposes shows that, while an improvement in energy efficiency can be expected over the period 1995-2030 in the region of 60%, we must still take into account an increase in the total use of energy for consumption by 50 to 75% (Vringer et al., 2001). Such figures stress the importance of anticipating the growth in prosperity when establishing environmental policy goals.

5.3 Analysing consumer patterns

To establish the environmental load on the basis of consumption we need data on the extent to which consumption shifts in the direction of fewer or less environmentally burdensome activities. To do this we must first have

an understanding of how money is spent on the various categories of expenditure and information about the environmental load of those categories. An increasingly smaller part of our incomes is being spent on nutrition and clothing (approximately 20% in Europe). These are general trends in the western world. While expenditure in the field of *housing* shows a decreasing tendency in the United States, in Europe it is stable (17-18%). In western nations there is a gradual growth in the share of expenditure *on amusement and recreation* up to approximately 11% in Japan and the United States, and 9% in Europe. While this growth progresses slower in Europe, it is relatively strong in the Netherlands (Eurostat, 1998).

Does an increase in the level of prosperity lead to a higher environmental load? One way of finding out is by checking whether higher incomes lay higher claims on the environment. One such analysis was carried out by Vringer et al., (1997) by analysing the direct and indirect energy consumption of the Dutch population divided into ten equally large groups with incremental incomes (the so-called incomes percentiles: the first percentile is the 10% of households on the lowest incomes, the tenth percentile is the 10% of households with the highest incomes). The analysis showed that the energy consumption does indeed increase strongly along with the income. However, of equal interest is the fact that within each percentile the spread between high and low consumption is almost the same. In other words: there are people who notoriously burden the environment and people who are relatively 'environmentally-sustainable' in each income group. A similar variation, both among and within the income groups, is also perceptible in the United States where it is also evident that ethnic-cultural differences offer a similarly strong explanation for the variation in energy consumption and in the physical elements, such as housing quality and the presence of equipment and, for instance, swimming pools (Lutzenhiser, 1997).

This brings the concept of 'lifestyle' into the picture. To obtain a proper understanding of consumer behaviour and the changeability thereof we should not so much look at the attitudes towards the environment and the availability of environmental information, but rather at the complete lifestyle of consumer groups. This line of reasoning is becoming more popular, but the question is how the concept of 'lifestyle' can be made operational. One way would be to bring spending patterns into the picture as was done in the above. However, this is difficult because the static categories are too inexact, and each Euro for example spent on a holiday can be spent in an environmentally-friendly fashion or not. Another way to look at lifestyles is by comparing materialistic lifestyles with more culturally-oriented lifestyles. Experiencing pleasure from an opera or finding one's amusement in the natural surroundings would therefore be

preferred above materialistic consumer behaviour such as going on a shopping spree. However, the question is whether such an opinion would stand on the basis of the factual environmental load. The environmental effect of a consumer's behaviour going on a trip for the weekend to London from Rotterdam, either to do shopping or to go to the opera, will be more or less the same; the same applies to a day of bird spotting on the Waddenzee compared with a day watching the car races at Francorchamps. A general statement as to lifestyles is of little help. The environmental load has nothing to do with a comparison between culture and materialism. What counts in this respect is how much energy and raw material consumption, emissions and residual waste is needed for each form of need satisfaction and the associated mobility.

A more promising consideration is probably to be found in the fact that consumers basically have a limited amount of money to spend (which increases slightly on an annual basis). Seen in this light it can be useful to look at the shifts that occur within this limited budget: is the one activity at the expense of the other activity, which is more environmentally harmful and which less? To do this we need information on the environmental effect per Euro spent. The principle could then be: 'performing the same activity more luxuriously'. This gives us twice the benefit: the cost per unit of need satisfaction increases while, simultaneously, the extra spending makes it impossible to spend alternatively. Moreover, there is then the experience of more quality, and the higher price might be an extra incentive to be more moderate.

The question remains, however, whether this is the right way to approach the problem. Trend analyses and attempts to quantify those analyses, establishing the environmental load per Euro spent, would seem to us to distract from the main task (the task also formulated on the production side; see section 4.2): to improve the efficiency of need satisfaction by a factor of 4 or more. Projects focusing on sustainable technological development are therefore concerned with both production and consumption. The question here could then just as well be: is it possible to achieve a break from the trend in environmental load per unit of consumption or per measure of prosperity or well-being, and in what way and under which societal conditions can it be achieved?

5.4 Addressing overconsumption: eco-sufficiency?

The question now is whether tendencies in consumer behaviour, such as the growth in volume of consumption and 'downturn behaviour' (such as in the laundry behaviour discussed above, or burning the low-energy lamp in the garden at night), threaten to discount the gained efficiency at the level of

product and production. Should it become evident that progress in the eco-efficiency of product and production is inadequate, then it will be necessary to change consumption volume by way of a change in lifestyle. In Agenda 21, the concept of 'sustainable consumption' was placed specifically in the context of 'an exceptionally high level of consumption' in western nations with an explicit demand to change value patterns. This is a difficult claim for the authorities to deal with. In a democratic system it is appropriate to assume that the state is not the first and foremost body to impose new social norms and values. The Dutch Government is therefore highly restrained in this respect. This is regrettable because there is a very useful discourse that could be held on overconsumption and the possibilities of sustainable consumer patterns and eco-sufficiency. It would imply that the policy discussion not only looks at making 'more consumption, but with cleaner products' possible, but particularly at the actual volume of consumption.

Initial moves towards such a normative debate are perceptible in civil society. Carley & Spapens in 'Sharing the world' (1998), for instance, explain the constantly growing level of consumption in highly developed western economies as the result of the 'work-and-spend disease'. They see overconsumption specifically as a social problem, characterised by excessive individualism and materialism, whereby individuals are imprisoned in a cyclical, social mechanism: perceiving what others have → wanting more →working harder to get it → earning more → consuming more, etc. Carley & Spapens demonstrate that this is chiefly a social mechanism (keeping up with the Joneses), fuelled partly by the market's interest in achieving growth and the role of advertising in the mass media. According to the American Merck Survey, a large section of the American population are aware of this mechanism: 88% say that they would change the way they live in order to protect the environment, 82% felt that most Americans buy and consume far more than we need; and 66% would be more satisfied if they could spend more time with family and friends (cited in Carley & Spapens, 1998, pp. 146-147).

An anti-materialistic counter-movement has even emerged in response to this mechanism in the civil societies of several nations such as the USA and the Netherlands. This movement consists of people who wish to disrupt this cycle because they no longer believe in the added value of continually more wealth by way of material goods. Examples are the American Center for a New American Dream which advocates downshifting consumption, the Dutch organisation 'Frugality With Style', and the 'Buy Nothing Days' (see also publications such as Robin & Dominguez, 1992; Van Veen & Van Eeden, 1994; Leiss, 1976).

Such an interpretation of the concept of 'sustainable consumption', focused on a morality of eco-sufficiency, is hardly echoed in today's environmental policy. The accent is on minimising unnecessary wastage of

energy and waste and on the route towards improving products, whereby the citizen is addressed as a critical consumer.

5.5 Consumption as the neglected element of environmental policy

While the initiative had been taken earlier, an environmental policy focusing on consumers only came into being in the 1990s in the Netherlands. Back in 1972 the minister responsible for matters of the environment already stated that it was beyond all doubt "that in a society such as ours in the Netherlands, economic growth must be controlled. It is not only a matter of more clean manufacturing, but also a question of being critical in what we consume and leading a prudent life" (Stichting Natuur en Milieu, 1975, p. 93). However, the consumer has only been focused on half-heartedly for many years in environmental policy. While the importance of the consumer's role was always recognised, it was never given much priority. In the 1970s and 1980s citizens were furnished with information and presented with campaigns by environmental and consumer organisations (Ministry of Public Health and Environmental Hygiene, 1972, p. 21; Centrale Raad voor de Milieuhygiëne 1981, p. 30). It is a typically Dutch idea that information on aspects of the environment, especially in terms of making consumers aware and alternative ways of doing things, is much better if it is not given by the government but by civil society organisations – but with the government's financial support. Nevertheless, the government did present some practical, often moralising, biased advice regarding alternative ways to act, relating originally to the use and disposal stage in particular (e.g. when the bottle banks were introduced in the 1970s), and more recently in connection with purchasing behaviour and the use of motorcars ('your car can manage alright for a day without you').

In addition to these communicative instruments, other instruments were also put to modest use in the 1970s and 1980s, statutory requirements or prohibitive rules on products for instance. Also some economic instruments were legally available, like levies (e.g. on petrol) and deposit money, but they were not always applied in practice. We should also mention rules and agreements regarding the use and misuse of advertising in connection with the environment.

From the very beginning, environmental policy has had to grapple with the dilemma as to whether the environmental consequences of increasing levels of consumption should be influenced via the demand side (management focusing directly on the consumer) or the supply side (management focusing on the manufacturers and retailers of the goods consumed). Management via the demand side has the disadvantage that the

citizen, or better: the voter, is addressed moralistically, and this does not tend to make the elected policy makers be all that popular. Management via the supply side implies that while product performance can be influenced, the development in consumption volume cannot, and thus the problem could possibly remain unmanageable. It is for this reason that both routes are taken in practice.

The first National Environmental Policy Plan in 1989 marked a paradigm shift in policy focusing on consumers. Households were labelled as a new 'target group' in this plan because of their position as a link in the chain of production – trade – consumption – disposal. This policy document recognised the consumer for the first time as an actor who is able to exert a certain element of power on manufacturers by virtue of his purchasing choices. A threefold strategy was drawn up. Firstly, the consumer was addressed on his purchasing behaviour. In turn, it was made possible for the consumer to react by the second strategy: creating a better supply of information on the environmental consequences. Thirdly, the retail trade was called upon to offer an environmentally friendly range of products. The latter strategy was with a view to stimulating innovations among manufacturers.

For the first time, the objects for several environmental themes for the year 2000 were quantified, such as:

– the total separation of household waste streams;
– a 40% improvement in energy efficiency in 2000 as against the 1985 figures for household electricity consumption;
– a maximum growth of 20% in car mileage as against the estimated growth of 40% over the period 1985-2000;
– a 50% reduction in the use of solvents.

(Ministry of Housing, Spatial Planning and the Environment, 1989, pp. 194-205, 219-223).

The introduction of an ecolabel was also announced, an advertising code of conduct, and the environmental inspection of several important product groups (Ministry of Housing, Spatial Planning and the Environment, 1990, pp. 36-40). At the end of 1993 a separate policy document on Products and the Environment was published. The main objective to which reference was made in this document was to realise a situation in which the market parties, i.e. the manufacturers, the retail trade and consumers, constantly aim towards achieving a reduction in the environmental load of products (Ministry of Housing, Spatial Planning and the Environment, 1993). A great deal of attention in this document was devoted to the further development of a good supply of information about the environmental load of products and the environmental load resulting from their use. To this end, support was given to the development of the so-called life-cycle assessment

method and to the development of different forms of information exchange between manufacturers (product registers), between manufacturers and the retail trade, and between trade and industry and consumers. A large part of the document is devoted to stimulating environmentally friendly design and improving production and the retail trade.

Consumption-oriented policy was set in a wider framework in this Product and the Environment document. For instance, it was stated that consumers, who basically are very much aware of the aspects of the environment, must be helped to bridge the gap between attitude and actual (purchase) behaviour by providing them with appropriate facilities, by offering them a good range of products, and by giving them relevant information. The document suggested that this should be achieved mainly on the part of the supply side because the implementation of legislation or the drawing up of agreements is out of the question for this target group. Essential new policies would be: the provision of product information by means of environmental information attached to products, the ecolabel, the setting up of a central environmental information centre, by encouraging the establishment of repair services and recycling shops, and by promoting an environmental purchasing policy among institutional consumers such as the government and other large organisations. By no means all of these plans have become reality to date; the environmental information on products has for the time being been dropped because of the objections raised by the industry. While the growth in activities of recycling shops and repair services has been low, it was not due to policy measures but occurred autonomously. The Dutch Ecolabel (Milieukeur) was introduced in 1992 and, after years of postponement, Milieu Centraal has been operational since 1998 as the planned central information centre on products and can now be contacted by telephone and through the Internet.

Policy focusing on consumption is also pursued by other authorities. At central government level for instance, the more active attitude adopted by the Ministry of Agriculture is relevant in this respect. Since the Plan of Approach for biological agriculture was published in 1996, these products have been stimulated by means of the chain approach. Solutions to problems in the various links of the chain (including production, the wholesale trade, retail trade and marketing) are searched for mutually (Ministry of Agriculture, Nature Management and Fisheries, 1996).

5.6 The effects of policy

Addressing consumers via the mass media

The question is how far this intensified level of attention for the environmental consequences of consumption has started to pay off. We must not forget that many of the policy efforts are aimed at influencing via

the supply side: improving the information infrastructure and stimulating the increased supply of products with a better environmental performance. We have already discussed the progress regarding product improvements in section 4.6.

The essence of policy on the demand side is to a large extent geared towards information in the mass media such as the use of short television commercials. Studies in this field show that the direct effect on behaviour is quite low. Nevertheless, there is a lasting wide support for environmental policy and less apocalyptic views on the environment among the Dutch population. The Annual Environmental Behaviour Monitoring study, a longitudinal research on environmental behaviour which has been running for ten years now, shows that in the second half of the 1990s the Dutch population increasingly saw environmental problems as an important issue. Between 1995 and 1999 the percentage stating that the environment was "one of the most important issues" rose from 40 to 47%. The number of persons stating that it was "the most important issue" was between 17 and 20%. Also quite remarkable is the (small) growth in the number of persons stating that environmental issues were the greatest threat to the future: 27% in 1995 and 33% in 1999 (Couvert & Reuling, 2000, pp. 24, 31, 41). Comparable conclusions are also to be found in Hoefnagel et al., (1996) and Ester &Vinken (2000).

What we actually do see is a strong shift in the perception of environmental issues. These issues are rather seen as less of a threat to our health or for our descendants, and a growing number of people feel that "the fuss about the environment is overdone" (Couvert & Reuling, 2000, p. 57). So public opinion tends to shift away from apocalyptic interpretations. We also see a shift in opinions on responsibility. Dutch environmental policy is built on the principle of a shared responsibility of producers, retailers and consumers. Nevertheless, public opinion today tends to see industry as the responsible party; individuals see themselves less as being responsible (Couvert & Reuling, 2000, pp. 50-51).

The perception of one's own responsibility is probably the most significant explanation for the gap between attitude and actual behaviour. Analyses show that this gap is the smallest in the field of waste disposal and energy and water saving, but is particularly wide in the field of nutrition, mobility and purchasing behaviour (see Hoefnagel et al., 1996; Becker et al., 1996, Steg, 1999; National Institute of Public Health and the Environment, 1998; Couvert & Reuling, 1999). In other words, real consumption is kept out of the picture. In this respect we must not forget that these public-oriented studies failed to come to real grips with the problem because, in addition to the gap between attitude and behaviour, there is also a gap between what a person says he does in the answers he gives in surveys and what he actually does in real life. This is because he wishes to give a socially acceptable answer and not always, or not fully,

uses a behavioural alternative. For instance: between 1993 and 1996 a total of 80 to 86% of the population said in surveys that they collected their waste paper separately (Couvert & Reuling, 1999, p. 84), while the actual behavioural effect, measured as the share of separately processed waste, grew in that period from 30 to 35% (National Institute of Public Health and the Environment, 1998). In the same period, 86 to 89% claimed to separate their glass waste (Couvert & Reuling, 1999, p. 84), while the actual glass collection in that period grew from 68 to 75% (National Institute of Public Health and the Environment, 1998).

In addition to the acceptance or rejection of one's own responsibility for sustainable consumption, it is quite feasible that the gap between attitude and behaviour can be explained by the quality of the information. Once a search is undertaken for environmental information, the affable consumer is liable to drown in the abundant supply. A list of information material on environmentally friendly behaviour issued by central government, the public utility services, environmental organisations and published in books on the subject, soon adds up to more that 200 behavioural alternatives, varying from 'buy low-energy light-bulbs' and 'do your laundry at the lowest feasible temperature' to 'hang up a nesting box' and 'share your house with other people'. The consumer is unable to see the wood for the trees. The plausibility of the information is at stake here: is it a question of advice in which the environmental merit is evident (e.g. a 10% saving on the annual electricity consumption), or is it a normative or ideological message?

A problem that crops up when establishing a plausible claim regarding the environmental merits of alternative behaviour is that the methods for systematically determining those merits (e.g. life-cycle analyses, environmental measures, eco-indicators, etc.) were only developed in the course of the 1990s. Moreover, these methods are not entirely undisputed as yet. Furthermore, the necessary information is often unavailable as yet and analyses contain assumptions and normative elements which in turn can again be disputed (Vermeulen & De Bok, 2000). This led to a cacophony of environmental assessments and the refutation thereof, especially in the first half of the 1990s.

The effect of social networks and incentives

Approaches other than the mass media are also taken to bridge the gap between attitude and behaviour. The social network approach involves making use of the elements that bind small groups together in order to ensure that awareness and information transfer is more effective. One example in this respect is the ecoteam, an approach developed by Global Action Plan (GAP). These ecoteams, groups of approximately 10 persons (neighbours, friends or co-workers), look at information about the

environment and alternative behaviour on the basis of a workbook and discuss what they do themselves, and what they can still do. By recording their own behaviour and by reporting on that behaviour jointly to the organisation, feed back on behaviour is ensured and a certain competitive element is also brought in. Research conducted by Harland & Staats (1995) shows that this approach leads to a further change in behaviour as well as longer-lasting behaviour. One point that should be made here however is that this programme reaches especially those persons that already have an interest in the environment.

Other experiments based on the social network approach also show that it can be considerably more successful than information through the mass media (Weenig, 1994, pp. 205-210). And yet another approach is to make use of emotions, i.e. positive and negative feelings. Regular marketing has also used the emotional element since time immemorial. Exploratory studies show that this approach is able to increase the motivation to actually use the information offered (Midden & Louw, 1994, p. 213).

In addition to management by means of the communicative management model, in consumer policy we also see management by means of instruments conform to the market, such as price incentives. These have been used for quite some time now. Debates have been held on the assumed effects of such instruments. What can we say here on the basis of empirical studies? Vermeend & Van der Vaart (1998, p.45) show that we can expect 1.7 to 2.7 million tonnes of CO_2 will be saved each year from the regulatory energy levy. These expectations are based on model calculations. However, a recent evaluation of the energy levy shows that only half the population is aware of this levy and that no more than 2% of all households take this energy levy into account when using electricity (Staatscourant, 1998). Hence very little can be expected in terms of behaviour.

The effect of product information

As we have already stated, improving the supply of information to consumers plays a pivotal role in policy. What can be said at this point in time as to its effects? First of all we must point out that the Netherlands does not exactly lead the way in the field of eco-labelling. At the introduction of the Dutch Ecolabel in 1992 eco-labelling programmes were in place in a total of 22 countries. In 1999 one or more eco-labelling programmes were available in all the countries of the European Union, as well as in the United States, Canada and Japan. Programmes have also been introduced in various other countries, particularly in the emerging economies in Asia.

Despite this wide diffusion there is little firm evidence as to the effects of eco-labelling. The effect can be measured by the influence on

manufacturers (do they change their products and do they apply for an eco-label for new, clean products?) and on consumers (to what extent are they aware of these labels, and do they actually buy these products?). Very few reliable figures are available, especially on the market effects. This is partly because the manufacturers fail to publish these figures. The OECD also notes that it is difficult to make an assessment on the basis of fragmented anecdotal information. A Dutch example in this respect is the large growth in the market share of the first cat litter supplier to market this product with an Ecolabel. The OECD does however conclude that "Producers however continue to apply for and pay for eco-labels, indicating they have some market value" (OECD, 1997, p. 5).

As we can see from Table 5.2 the ecolabel programme was slow to start in the Netherlands. Manufacturers' organisations adopted a reticent attitude regarding their participation in the programme; in some cases the programme was even boycotted. When assessing the effects of an eco-labelling programme not too much value should be attached to these boycotts. They are generally only temporary, as was evident in the past regarding the boycotts of subsidy programmes (see for instance Vermeulen, 1992, pp. 189-195). After some time there is usually one manufacturer or one retailer who sees the opportunity to increase his market share by using eco-labels; these are then followed by others. The OECD concludes that: "Overall, eco-labelling has only been moderately successful with the individual consumer. However, eco-labels may have an important market impact when retailers specify their wish to stock products with eco-labels (for instance ICA in Sweden), or when they become a tool in identifying environmentally preferable products for government procurement and institutional procurement" (OECD, 1997, p. 6).

country	since	name	number of product groups	number of approved products
Germany	1978	Blaue Engel	214	40,000
Japan	1989	Eco Mark	68	3,450
Scandinavia	1991	Nordic Swan	52	2,500
European Union	1992	European seal of approval	14	250
the Netherlands	1992	Milieukeur	27	200
Taiwan	1992	Green Mark	58	800

Table 5.2 Eco-labelling in some countries: the situation around 1999/2000 (The Global Eco-labelling Network (GEN): http://www.gen.gr.jp/; Stichting Milieukeur, 1999)

The slow progress of policy focusing on improving environmental information has not been without consequence. The already mentioned Annual Environmental Behaviour Monitoring study has shown that attention given to the environment in purchasing behaviour is on the wane: in 1993 a total of 17% of the Dutch population said to take environmental aspects into account when making purchases, in 1998 this has decreased to 10% (Couvert & Reuling, 1999, p. 84).

Market shares for environmentally approved products

The best way to find out whether policy focusing on consumption is effective is by determining the extent to which there is an increase in the market share of environmentally-friendly products and an actual decrease in the consumption of energy and petrol. Unfortunately, only very little, fragmented information is available on market shares. Better information is available in the field of energy saving. The consumption of electricity is still on the increase (3.4% per annum in the 1990s). Gas consumption figures show a slight decrease as a result of improved insulation methods used in the building trade and the breakthrough of high efficiency boilers for central heating and other forms of sustainable building (Brezet, 1994). In the field of mobility there is no question of a break from the trend for the time being. Ester & Vinken even found that, where they were able to identify a group of green consumers showing consistent beliefs and behaviour in the field of water and energy saving, these green consumers still use their cars as much as other people for their work, shopping and visiting friends (Ester & Vinken, 2000, p. 95). The increase in car mileage was in the region of 2% per annum in the 1990s but now seems to be stabilising, partly as a result of road congestion. Nevertheless, a gradual rise is seen in rail travel (3.5% per annum), while the number of kilometres travelled on public transport is still only a fraction of the kilometres driven by private car (1 to 7-8 km) (National Institute of Public Health and the Environment, 1998).

In section 5.2 we illustrated how the total energy requirement for Dutch household consumption consists for more than two thirds out of activities in the field of housing, heating, nutrition, clothing and caring. Policy focusing on minimising the energy load as a result of consumption will therefore need to be focused to a comparable extent on these everyday household activities and the products used. There are few impressive moves away from the trend to be seen in these fields as yet.

Changing consumer patterns and values?

The slow progress in minimising the environmental load from consumption brings the debate on ‘overconsumption’ into the picture. Several reports are available on this subject; the general picture is one which shows that we should cherish no high expectations on controlled changes in value patterns

in the direction of post-material values. In the Netherlands, Aarts studied the opportunities of diffusion of such post-materialist forms of consumer self-restraint. She expects that "the social trickle-down mechanism, which also explains the diffusion of social values concerning non-smoking behaviour, might enforce 'frugality with style' values." "However," she concludes that "these values remain restricted to a very small group of highly educated / high income people and they are not be likely to be followed as a role model". (Aarts et al., 1995; Aarts, 1999). "A problem here is that the message of 'ever growing levels of consumption having negative effects on the level of (social) well-being' does not ring a bell for most consumers in western societies." The World Values Survey conducted by Inglehart et al., shows us the limits of normative judgements on the consumer behaviour of others. Most people will not perceive high levels of material welfare as conducive to unhappiness. As a matter of fact, high national levels of happiness correlate with levels of economic welfare, even though adherence to post-materialist values is rising in time and in connection with levels of welfare. (Inglehart et al., 1997).

5.7 The changing role pattern among actors

The direct effects of the – still young – consumer-geared policy might well not be in full view as yet, what can be seen is the emergence of new forms of cooperation among the actors involved. The government, the market and NGOs have entered into different forms of cooperation over the past few years. One example being the Stichting Milieukeur, the Dutch ecolabel organisation. The background of this organisation shows that such cooperation does not progress pliantly automatically. The representatives of employers' organisations and the government work together in this organisation. Environmental seals of approval are awarded on the basis of fixed criteria (so-called certification models). A specific procedure must to be gone through in order to ascertain these criteria. Draft criteria are formulated after an exploratory examination. In this stage, the manufacturers, consumers, environmental organisations and scientific experts are able to influence the criteria that is to be drawn up. Despite this cooperation, the organisations of manufacturers called upon their members in the 1990s not to use environmental seals of approval. Apart from that, the ecolabel also has other effects: manufacturers use it when developing their products and are thus able to save themselves valuable time they would otherwise need to spend on establishing essential improvements, even if they do not intend to apply for an ecolabel.

Similarly, a central platform has come into being for the objective of generating reliable environmental information on products and environmental claims made by the manufacturers. This platform, Milieu

Centraal, is run on the same lines in which a procedure of listening to both sides of the argument results in an agreement on environmental claims. This procedure helps to ensure greater uniformity of environmental information and thus avoids the need for businesses to become engaged in discussions with other businesses or environmental organisations on the details of environmental claims.

Such cooperative relationships have also emerged among businesses and environmental organisations. The environmental organisations run product campaigns that bring manufacturers of products with a high environmental performance into the spotlight. Another example is the cooperation between Greenpeace and manufacturers, electricians and energy companies, focusing on the realisation of a lower price for PV cells. This environmental organisation has taken it upon itself to ensure sufficient demand. In eighteen months time there were 5,000 applications for the installation of solar cells – even though more had been hoped for – and Greenpeace turned out to be an unreliable partner (Glasbergen & Groenenberg, 2001).

Another 'relative' success was the appearance of the weekly 'vegetable subscription'. This implies that the producer and consumer enter into a partnership. The producer thus has more certainty as to what he can produce, and the customer is assured of the quality of his food. In 1999 the number of vegetable and fruit subscriptions grew to 45,000. This trend was seen by the government as proof of the professionalisation of environmental marketing (Ministry of Housing, Spatial Planning and the Environment, 1997).

This development marks the new approach taken by the biological agriculture sector over the past few years in which biological food is taken out of the 'alternative' segment. Research shows that a large section of the population, some 30-40%, might be interested in this food, especially because of its image as healthy food (Baggerman & Hack, 1992). For a long time, the market share remained below the poor level of 1%, or even 0.1% for biological meat. The new approach has at least led to a breakthrough in the regular retail trade (vegetable farmers and supermarkets). Sales, which over the last few years had been slowing down and, in comparison with other North West European countries, lagging behind in terms of sales started to grow again in the last few years of the 20th Century. In mid-1999 an increase was noted in the market share of biological dairy produce of 150% compared with 1998 (from 0.6% to 1.5%) (EKO-monitor, 1999, p. 6). In connection with this development, the number of biological agricultural businesses doubled in 5 years (EKO-monitor, 1999, p. 5).

While minor breakthroughs such as these are interesting, they do have their limitations. An initial segment of the market is achieved for the

product in question: 2%, 5% or 10%. Occasionally, such as in the foregoing example, a larger segment can be achieved 'in principle'. However, not all consumers will take this road. This also applies in general for non-food products whereby the manufacturers that anticipate the demand for environmentally friendly products are often the manufacturers of the more expensive and higher quality brands. For this group of manufacturers it can probably increase their market share considerably, yet the effect on the entire market is still only small. The question whether these small 'successes' can result in a domino effect and lead to larger 'successes' which have a wider effect on the market is therefore essential; will the rest of the suppliers in the relevant trade (preferably the manufacturers with a large share in the market) react with improvements, for instance by improving their environmental management or possibly with less far-reaching, but gradually progressive product improvements? While these mechanisms have hardly been examined they are still very relevant. After all, an 80% reduction in the environmental load from products for 2% of the market results in a total improvement of only 1.6%. A 20% reduction in the environmental load from products for 98% of the market results in a total improvement of 19.6%. If such a domino effect does occur, then it will be much easier to make the quality requirements at the lower end of the market more strict. Even though in the Netherlands there is a dependency upon developments abroad, similar trends are perceptible there too.

In the Netherlands the government barely anticipates such mechanisms; the strategy is more or less to trust upon the promises of environmentally oriented product development. The government holds the opinion that citizens may only be requested to purchase environmentally friendly goods if the price-quality ratio is comparable with the usual product, otherwise it is being moralising. More is expected from a collective approach in which the government and NGOs (including businesses and trade organisations) interpret the 'sustainability morality' into a range of goals and the associated options for realising them. To achieve this the government is organising consultations with producers, suppliers, retailers and consumers representing the entire life cycle of various relevant area's of consumption, like food, clothing, dwelling, recreation and tourism.

5.8 Reflection: eco-efficient products and eco-sufficient consumption?

In this chapter we have taken a look at how consumption is influenced. Speaking in the words of Rio's Agenda 21, our 'exceptionally high level' of consumption was originally a neglected element of environmental policy

but it has now increasingly become the object of policy. If we look at the developments in consumer behaviour, then we can only conclude that realising those goals is for the time being still out of view. Although certain changes have been brought about in consumer behaviour (reuse, gas consumption), policy has still not succeeded in achieving a substantial reduction in the environmental load that results from our consumption habits. We illustrated that the reciprocal dependencies between consumers, manufacturers and the trade call for a good balance between *management,* by way of supply plus the technology applied on the one hand, and *influencing* the demand on the other.

A quite clear trend is emerging in the direction of an emphasis on management via the market parties and increasing the supply of environmentally-friendly products. The consumer is addressed mainly as a rational, calculating consumer. This approach is fully in line with the consensus set out in Chapter 4 on co-responsibility that exists in government circles and the elite of the business community. The primacy to increase the eco-efficiency of production and consumption therefore lies with the manufacturers. It may quite rightly be expected that the manufacturers themselves will be the most capable party to substantially improve the environmental performance of products. However, the question still remains as to the extent that this will lead to a domino effect in the market.

This orientation on the potential of the market is restricted in the sense that it offers absolutely no points of departure for the normative element of the Declaration of Rio. Quite naturally there are two key questions in this respect: do we really need to address overconsumption, and who will be in the position to promote post-materialist values. We can establish that these issues of environmental policy are being ignored for the time being. There are good reasons to state that both state and market are not in a suitable position to carry out this task. Pursuing a public debate on consumer patterns and post-materialist values and lifestyles is a function set aside for civil society par excellence. Following Dutch tradition it can be added to this that the state is able to facilitate that role by supporting the capacity of non-government organisations. An expansion of consumer-related environmental policies in that direction might bring along a good balance between the promotion of eco-efficiency via the market and the promotion of eco-sufficiency via civil society.

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