Chapter 5

Sustainable development as a guiding principle?
Limburg, the Netherlands, as a case study[2]

Annemarie van Zeijl-Rozema

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[2] This chapter is based on PhD work previously published in Van Zeijl-Rozema, 2011.

Abstract

This chapter explores the question what makes it so difficult to realise sustainable development, and aims to identify some strategies to promote the implementation of sustainable development. The topic was studied by conducting a regional survey in the Dutch province of Limburg. More than 900 people responded. Our hypothesis was that the general public might have a limited understanding of the consequences of sustainable development, which could act as a barrier to action. At the same time, we hypothesised that people might be "doing" sustainable development without knowing it, which would make a transition towards sustainable development an issue more of labelling than of behavioural change. We investigated people's awareness and understanding of sustainable development, as well as their perception of their own sustainability, their willingness to become more sustainable and finally the current level of sustainable considerations regarding goods and services. The results were used to derive several pathways for action.

5.1 Introduction

In studies into the implementation of sustainable development, there is often a discrepancy between what people say they want to do and their actual behaviour (e.g. Claudy, Peterson et al. 2013; Beumer 2014; Vasseur 2014). In a recent study in the Dutch province of Limburg, 83% of people said they had included sustainable development in their lives, and 90% of the people wanted to become even more sustainable in the future.

But what do people actually mean when they say they have included sustainable development in their lives, and to what extent is sustainable development a part of the choices they make in their lives? If these issues are understood in more detail, this might provide policy makers with some levers for influencing behaviour towards sustainability. In order to find out more about this topic, a region survey was conducted in the Dutch province of Limburg. More than 900 people responded. Information was obtained about the respondents' level of awareness and understanding of sustainable development, the extent to which their behaviour was sustainable, and their opinion about sustainable development.

Sustainable development is a complex concept, involving different temporal and spatial scales and multiple stakeholders (Martens 2006). It refers to a societal process of changes whose development goal is not clearly outlined and is subject to changes throughout the process. Fostering processes of sustainable development requires a pluralistic approach that can deal with multiple actors and multiple levels, and that is able to help create a shared vision of sustainable development and resolve trade-offs (Zeijl-Rozema van, Cörvers et al. 2008). The concept of sustainable development requires the planet and our world to be seen as a system, a system that connects space ("here and there") and time ("now and later") (IISD 2007). Simultaneously, sustainable development can be seen as a political or normative act, rather than a scientific concept. After all, sustainable development is about the quality of life that is desired now and in the future. Sustainable development is about making choices and trade-offs visible within the context of our desired future. This desired future will differ from place to place and from person to person. Hence, visions of a sustainable society may differ, not only between places, but also for the same place over time.

In view of its integrated nature and the related complexity, achieving sustainable development is not easy. This chapter explores the question what makes it so difficult to realise sustainable development and aims to identify some strategies to promote the implementation of sustainable development.

5.2 Sustainable behaviour

Given the fact that sustainable development is a normative concept and means different things to different people, it is not easy to define it. However, the above-mentioned characteristics might give some clues. The essential characteristics are that sustainable development is about resolving trade-offs within the context of the desired future, and that it requires a systemic view of the world and of the impact of human actions on the world. Discussions of sustainable development often use the domains or capitals model, where sustainable development is seen as a balanced representation of the social, environmental, and economic domains (e.g. Elkington 1997). Governance is a way to organise these domains. It would then be plausible to say that sustainable behaviour is about ensuring that one's choices do not compromise this balance between the domains (see Figure 5.1).
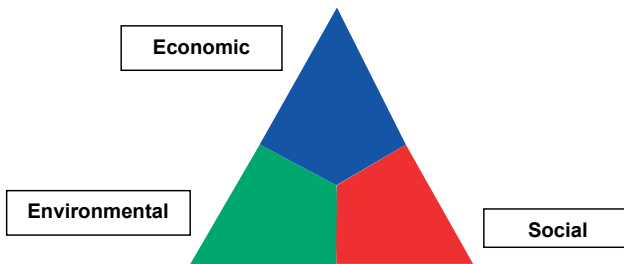

Figure 5.1 A balanced picture of sustainability

The actions people take in their lives all have implications for sustainability. Social practices theory is already being used to understand and explain unsustainable consumption levels (Kuijer 2014), which is why it is also used here to identify determinants of sustainable behaviour. In particular, we use the model by Spaargaren (2003), which distinguishes four social practices: leisure, consumption, mobility, and dwelling. For each of these practices, people make (conscious or unconscious) choices. In our study, people were asked about their considerations when making choices in these various categories, the assumption being that sustainable behaviour would be behaviour that balances the domains.

5.3 Familiarity with sustainable development

Respondents were asked whether they were familiar with the concept of sustainable development, what issues they could think of, what description of the concept fitted best and how important sustainable development was to them. Those who were familiar with sustainable development prior to the survey (72%) interpreted it as a balanced

development of society, the economy, and the environment. However, when asked about concrete actions that are part of sustainable development, they mainly chose environmental issues, while social and time-related issues were also often mentioned.

It can be concluded that sustainable development is relatively well-known and is understood in its broader sense at an abstract level as a balance between the domains of people, planet, and profit. Furthermore, 78% of all respondents indicated that sustainable development was important to them (see Figure 5.2).
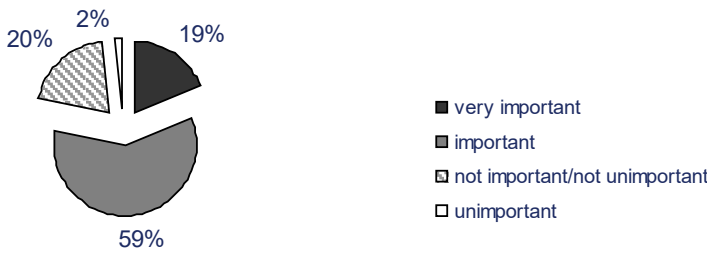

Figure 5.2 How important is sustainable development for you?

However, when confronted with a number of concrete topics that are part of sustainable development[3], 99% of the respondents interpreted sustainable development mainly as environmental issues (see Figure 5.3). This implies an important lesson: familiarity with sustainable development exists only at an abstract level. At a concrete level, environmental awareness is mainstream, but sustainable development is not.
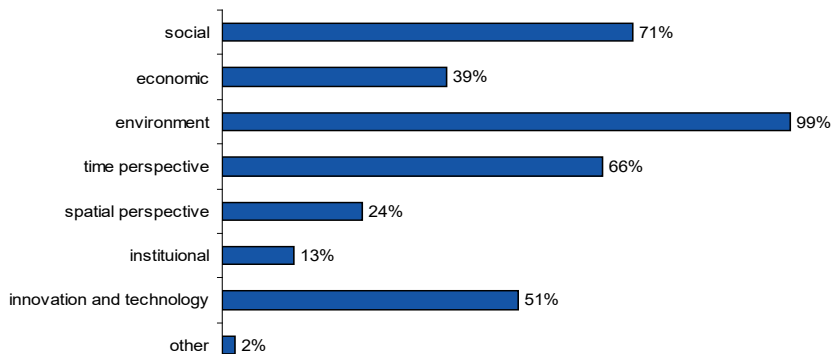

Figure 5.3 Topics related to sustainable development

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[3] Combating child labour, attention to climate change, local products, social cohesion, economic growth, care for the environment, waste separation, quality of governance, renewable energy, vegetarian diet, combating poverty, clean air, conscious choices, developing countries, health, short-term, future, innovation, nature, happiness, other.

Attempts to convert these findings into action should focus especially on the fact that people who are already aware of sustainable development score significantly higher in terms of sustainable actions. This leads to the conclusion that awareness plays a part in sustainable behaviour, especially regarding concrete examples of what sustainable development can mean at home, at work, and at school.

5.4 How sustainably do people act?

While the previous section looked at how people see themselves in terms of sustainability, this section investigates the actual behaviour of the Limburg population. Respondents were asked about their behaviour regarding mobility and their criteria for deciding on the procurement of goods and services. Sustainable behaviour would mean people basing their considerations on social, economic, and environmental criteria. But first of all, they were asked if they would like to live a more sustainable life in the future (see Figure 5.4).
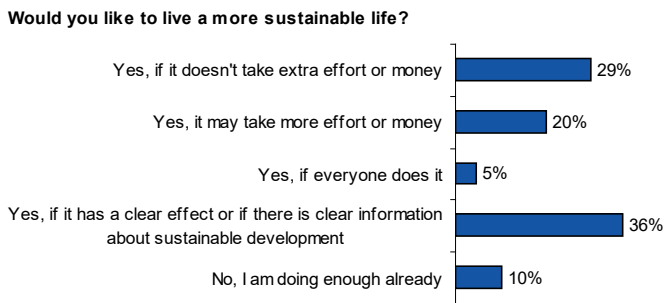
Would you like to live a more sustainable life?

Yes, if it doesn't take extra effort or money	29%
Yes, it may take more effort or money	20%
Yes, if everyone does it	5%
Yes, if it has a clear effect or if there is clear information about sustainable development	36%
No, I am doing enough already	10%

Figure 5.4 Becoming more sustainable

The majority of respondents say they did want to live more sustainably if there was a clear effect or if there was clear information on sustainable development (36%). This is followed by a group of people who said that they would like to live more sustainably provided it did not take more money or effort (29%). Next is the group who said that they would like to live more sustainable even if it cost more or took more effort (20%).

The following observations can be made. First, many respondents said living sustainably should not require more time or money. This means people are willing to change if it is easy. Unfortunately, easy change is not often possible. Nevertheless, this finding is an indication that easy options are required if people are to become more sustainable.

Secondly, people want to know the benefits to themselves. Apparently it is not clear how sustainable development will provide individual benefits. This might be related to the long time-frame of sustainable development and its inherent focus on the "greater good".

Related to this is a third point, viz. that people want to be more sustainable if it has a clear effect, which seems a broader issue, including both themselves and society. The

effects of sustainable behaviour should be made clear, which is where monitoring becomes important. However, the long time-frame for sustainable development and its associated low visibility might again be a problem. A solution might lie in participatory monitoring, which gives citizens a role in monitoring.

The fourth point is that there is a group of people who will follow the mainstream. However, we found that sustainable development is not mainstream, so efforts should focus on improving this. And lastly, there is the issue of people who indicate they only will act sustainably if they are forced to. Here one could think of regulations, financial incentives, and banning unsustainable products and services.

Now that we have shed some light on people's willingness to become more sustainable, it is time to look at their actual behaviour.

Mobility

Mobility is an important aspect of sustainable development. On the one hand, people's perception of quality of life depends on their freedom to travel, while on the other hand, car use and other means of transport impose a large burden on the environment. Also, mobility is something that concerns everybody on a daily basis. Respondents were asked about their home situation regarding mobility and how they went to work and/or school, to assess how sustainably they acted.

Fifty-eight percent of the households in Limburg own at least one car, and the majority of households drive between 10,000 and 50,000 km a year. People often use the car for short-distance trips around their homes, visiting family and friends, which shows that this will need to be one of the focal points of campaigns. One could think of stimulating alternatives for near-home car use by improving neighbourhood taxi services and delivery services. For day trips, accessibility of main railway and long-distance bus connections could be improved to stimulate longer-distance travel by public transport, and car-pooling and car-sharing facilities could also be improved (see Figure 5.5).

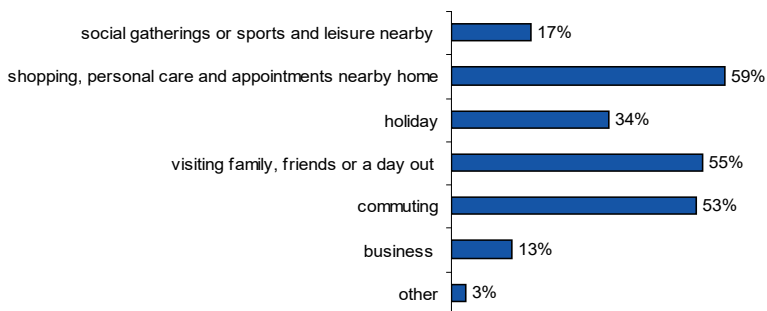**What do you use the car mainly for (max 3 answers)**

Category	Percentage
social gatherings or sports and leisure nearby	17%
shopping, personal care and appointments nearby home	59%
holiday	34%
visiting family, friends or a day out	55%
commuting	53%
business	13%
other	3%

Figure 5.5 Car use

People also frequently use the car for commuting to work or school. Some interesting results were found when comparing the answers from work commuters with those of school commuters. Travelling to school involves more muscle power and public transport than private motor transport, whereas private motorised transport is the most important means used to get to work. Apparently, once people start working they partly stop using the bicycle or public transport, and use their private car (see Table 5.1). Indeed, 20% of the students among our respondents (who were mainly in the under-25 age group) mentioned that their reason for choosing a particular type of transport is that they do not have a driving licence (yet). This is a group that might change to private motorised transport as soon as they obtain a licence.

Table 5.1 Most important means of transport for work and school

	Work	School[4]
Own muscle power	31%	47%
Private motor transport	62%	21%
Public transport	7%	25%

The reasons for choosing a particular type of transport are mainly that it is fast and easy. Not surprisingly, an important reason for students is the cost (3rd place). However, for those in work, the costs come 5th and the location of their work is a more important factor in choosing their means of transport (see Table 5.2). Of course, there are many other factors also related to the decision to opt for a particular type of mobility. For instance, respondents indicated that speed and accessibility are important factors for them in choosing a transport type for commuting. Alternatives to private motor transport should thus offer speed and flexibility.

Table 5.2 Top-3 reasons for choosing a particular means of transport

	Work	School
Fast	1 (47%)	1 (46%)
Easy	2 (45%)	2 (43%)
Cheap	5th place (22%)	3 (38%)
Necessary because of location	3 (31%)	5th place (22%)

The distance also plays a role in the type of transport chosen. The longer the distance travelled, the greater the shift from muscle power to motor power. Thirty minutes of commuting seems to be the average. However, there seems to be a gap at 5–10 km: this distance seems too great for people to rely on muscle power, and too short to take the bus or train. Instead, they use private motor transport, although cycling could still

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[4] The 8% unaccounted for is the "other" category, which represents mainly those students who live at home and do not need transport.

be an option. E-bikes and improved public transport services could be an answer to this issue. Finally, incentive schemes for environmentally friendly transport are not in place everywhere. Stimulation of environmentally friendly transport is done by public organisations and large organisations, but much less by others. These other employers and schools (especially small and medium-sized organisations) could be stimulated to set up incentive schemes and creative mobility solutions.

An important conclusion regarding mobility is that care for the environment is not an important consideration in choosing the means of mobility. This means that other strategies are needed that can make mobility more sustainable. Social issues of mobility were not taken into account, apart from the considerations for buying a car discussed below.

Sustainability considerations at home and at work

This section discusses which choices people make in their daily lives (at home and at work), in order to see how sustainable they are. Activities that were targeted for the domestic situation included issues such as shopping for food, buying a car, and choosing a holiday destination. The questions asked on this topic in the questionnaire were designed with Spaargaren's social practices model in mind (Spaargaren 2003). Using this model, the results were grouped into activities regarding Leisure, Consumption, Mobility, and Dwelling. Mobility has been extensively covered in the previous section and does not feature here. Possible considerations were derived from corporate social responsibility criteria (MVO Platform 2007), in addition to considerations of cost and quality, and grouped into the categories of social considerations (working conditions and trade relations at producers side), economic considerations (costs), environmental considerations (environmental pressure), quality consideration, and any other considerations. The results are divided into two parts: home and work. Table 5.3 shows how the two situations can be compared.

Table 5.3 Activities at home and at work

Home	Work
Leisure	**Not relevant**
Choosing a sports club	
Choosing a holiday destination	
Consumption	Production process and consumption
Shopping for food	Procurement of services
Buying clothes	Procurement of raw materials
Buying electrical appliances	Procurement of electrical appliances
Choosing an energy company	Procurement of energy
Buying a car	Procurement of catering
	Procurement of company vehicles
Mobility	Mobility
Previous section	Previous section
Dwelling	Using the office building
Separating waste	Waste management
Repairs and renovations	Repairs and renovations
Decorating a house	Decorating the office
Building a house	Building an office building
Designing a house	Designing an office building

Home

The activities that were conducted most often in the respondents' households in the 6 months preceding the survey were shopping for food, buying clothes, separating waste, doing repairs or renovation, and buying electrical appliances (see Figure 5.6), which belong to the Consumption and Dwelling categories.
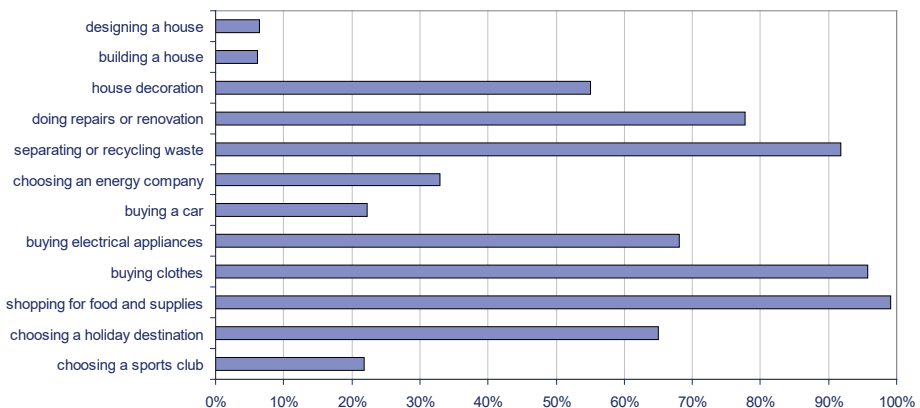

Figure 5.6 Activities in households in the 6 months before the survey

Economic and quality considerations were always among the two most important considerations mentioned, with two exceptions: when choosing an energy company, environmental considerations took second place, after economic considerations, and when separating waste, environmental considerations greatly prevailed over the second highest, economic considerations; for an example see Figure 5.7. Social and environmental considerations, two important pillars of sustainable development, are slightly important only when buying a car (environmental considerations), and when designing and building a house (social considerations).
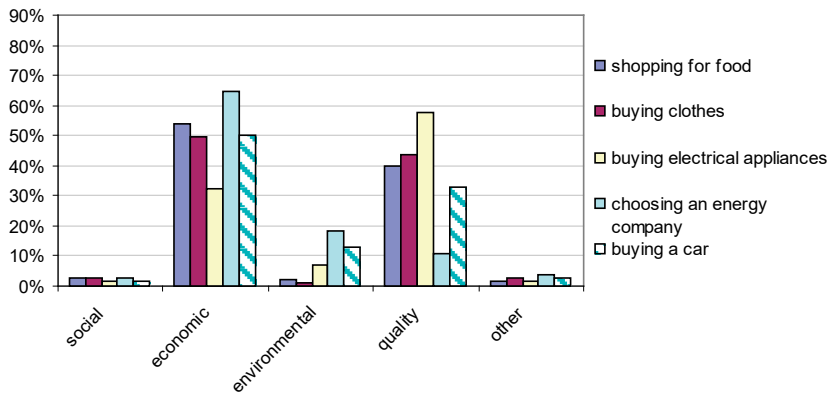

Figure 5.7 The most important considerations[5] for consumption

Work

The work situation generally shows similar trends as the home situation (see Figure 5.8 for an example). Cost and quality are the most important considerations.

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[5] Social considerations: labour conditions of producer or service provider (e.g. child labour, security of personnel, sufficient wages for "survival/subsistence") and procurement and trade conditions of producer or service provider (e.g. profit sharing for employees, fair contracts, "misusing" a dominant market position). Economic considerations: cost of the product or service. Environmental considerations: environmental pressure of the product or service. Quality considerations: quality of the product or service.
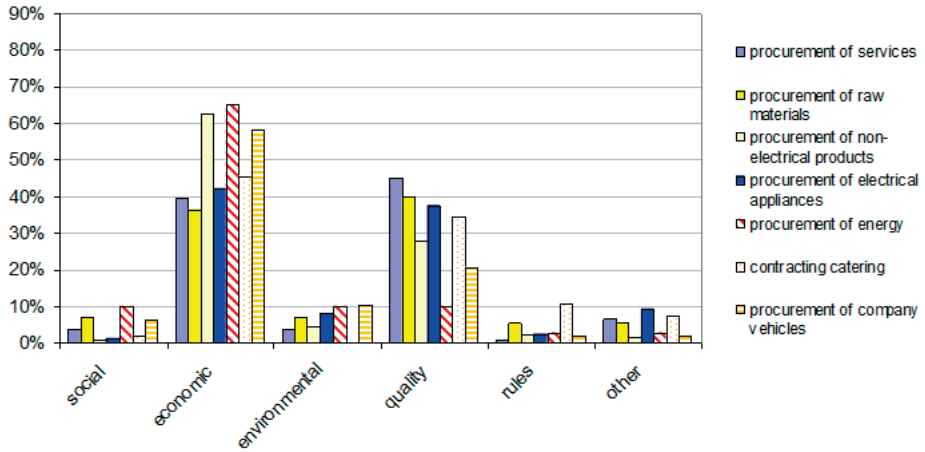
Figure 5.8 Most important considerations[5] for the production process and for consumption

The environment plays a role in waste management, procurement of company vehicles and procurement of energy, while social considerations play a role in the procurement of energy only. Company size is relevant for certain behaviours and awareness, e.g. small organisations do less for sustainable development than big ones, and would need special attention.

Unbalanced

Because environmental and social considerations are of minor importance, a very unbalanced picture of behaviour emerges, from a sustainable development perspective (see Figure 5.9). In fact, it was difficult to observe sustainable behaviour in the topics that were analysed, despite the fact that many people said they were living sustainably.
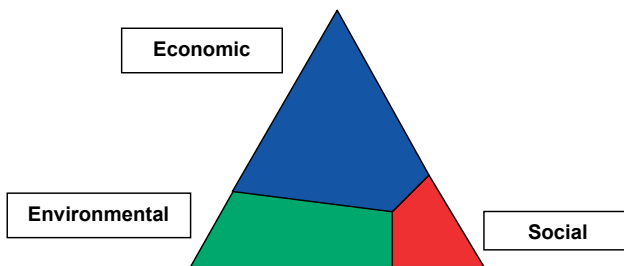

Figure 5.9 An unbalanced picture of sustainability

Given the fact that environmental considerations play such a small role, it can even be concluded that the environment is not a mainstream topic, which is in strong contrast

with the above conclusion that environmental awareness is mainstream. However, this can be explained by the above-mentioned gap between awareness and behaviour.

Just as in mobility behaviour, no sustainable actions were observed at home or at work. In this respect it is also important to note that economy-related issues scored rather low on what people think sustainable development is about, implying that the economy is not seen as an important part of sustainable development, although it is a very important consideration when procuring goods or services.

5.5 Pathways for action

This chapter aimed has examined the knowledge and behaviour of the Limburg population regarding sustainable development, in order to identify pathways for action. The hypothesis was that the public might have a limited understanding of the consequences of sustainable development, and that this would constitute a barrier to action. At the same time, we thought that people might be "doing" sustainable development without knowing it, which would make a transition towards sustainable development an issue more of labelling than of behavioural change.

Awareness

Regarding the understanding of the consequences of sustainable development, the survey showed that people think sustainable development is important. They understand sustainable development at an abstract level, but there is limited understanding of sustainable development at the level of concrete actions, and at a concrete level it is mostly interpreted as relating to the environment. The economy is not seen as a significant dimension of sustainable development. Those who are more aware of sustainable development are significantly more likely act sustainably. However, it has become clear that people have received very little information on sustainable development.

With respect to action, first of all, it is clear that the public need to be better informed about sustainable development. Indeed, people have not received a great deal of information on sustainable development, and thus one could argue that ignorance is a possible cause of unsustainable behaviour. More specifically, people need to know about the interrelatedness between the social, environmental, and economical domains and between time and space, and the impact of their actions. Furthermore, they need examples of concrete actions they can take. Options for action include information and awareness campaigns at school, at work, in the supermarket, in shopping streets. Another option would be to provide people with product information on sustainable development.

Behaviour

Regarding sustainable behaviour, our survey found that people say they are sustainable and want to become even more sustainable, but this should not take more time or money, and individual benefits and effects of sustainable behaviour should be clear. Sustainable behaviour was not observed, and people do not act sustainably (yet), nor do they know what they can do. Their behaviour is mainly driven by quality and cost considerations.

   Actions to improve sustainable behaviour could address a variety of issues. The first is to make the sustainable option the easiest option, though with acceptable quality and cost. Other actions include providing product information, helping people to determine the sustainability of their actions, and offering alternative mobility solutions that ensure speed and accessibility. The bottom line is that people should not be bothered too much with having to decide what is sustainable and what is not.

   Furthermore, an enabling environment can be created to promote these changes. Because sustainable development is such a long-term process, government seems to be ideally placed to coordinate the creation of an enabling environment that allows markets and civil society to act and that safeguards the road towards a sustainable future by means of (participatory) monitoring and keeping track of deviations from the overall goals. Monitoring will also meet the expressed need to know the effects of one's individual actions on sustainability.

From abstract to concrete

It is important to note that the proposed actions are interrelated and mutually reinforcing, and therefore should be addressed in parallel. Also, different groups need different approaches: there are differences in activities and in criteria for decision-making with respect to age, gender, education, and awareness, as well as company size.

   The complexity of sustainable development makes it impossible to judge precisely what harm or benefit will result from one's actions. However, analyses such as the above help to move from the intangible abstract level of interconnectedness to the more concrete practical level of taking action.

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