

URBAN PLANNING AND ENVIRONMENT



Smart Methods for Environmental Externalities

Urban Planning, Environmental Health
and Hygiene in the Netherlands

Gert de Roo, Jelger Visser
and Christian Zuidema

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Preface

Smart Methods for Environmental Externalities is about methods that have been created in the Netherlands. This is rather special and unusual for an international publication on environmental policy and spatial planning. It is felt that the Dutch methods for environmental externalities have evolved in a rather unique way that is incomparable to any other country in Europe and beyond. The evolution of the methods has resulted in a wide range of alternatives for policymakers and government officials to choose from when considering issues such as environmental health and hygiene, spatial development, urban renewal, neighbourhood renovation and the like. The wide range of methods for environmental externalities can therefore be of interest to an international audience, dealing with environmental intrusion and the liveability of the urban environment. We would therefore like to express our sincere thanks to our peers and our publisher for embracing this argument.

In the past we have presented Dutch methods dealing spatially with environmental externalities to the international arena, in various publications, but not yet in a comparative and coherent form. We have published books categorizing methods for environmental externalities, but not for an international readership. This book, *Smart Methods for Environmental Externalities*, addresses the unique evolution of Dutch initiatives, which has resulted in a wide range of complementary methods. For us, this meant putting aside those methods, such as Environmental Impact Assessments, that are known, accepted and used globally, despite the fact that EIS is used in the Netherlands with a Dutch 'twist'. Neither have we discussed in great detail the international developments regarding methods for environmental externalities, despite the fact that we know they exist. It would have been a challenge, but a different form of research, that is beyond the scope of this particular book. You will be able to read more on that subject in other books in the Ashgate series *Urban Planning and Environment*.

Although there are several methods – in the Netherlands and internationally – for dealing with environmentally intrusive and environmentally sensitive functions, they do not have a general name. The Dutch language does not offer much help in this respect. As we have been researching environmental-spatial conflicts for many years, we began presenting the methods for dealing with these conflicts as 'environmental-spatial methods'. Other names have also been proposed: 'methods for environmental awareness' and 'area-specific environmental assessment tools'. No doubt more obscure proposals have also been suggested over time. Eventually the name was narrowed down to 'methods dealing with the spatial consequences of environmental externalities', which we quickly shortened to 'spatial methods

for dealing with environmental externalities' and subsequently, for practical and publicity reasons, further abbreviated this to 'methods for environmental externalities'.

We believe that the methods are just that, namely 'for environmental externalities', with 'externalities' intrinsically addressing the spatial perspective of issues. The addition of the word 'Smart' to the title of this book was not just for the sake of publicity. We could explain S.M.A.R.T. as referring to Self-Monitoring, Analysis, and Reporting Technology, and no doubt a number of the methods presented would meet this criterion. But that would be a retrospective and 'super-imposed' construction. For us, 'smart methods for environmental externalities' refers to the innovative and integrative qualities of the methods presented, bridging two policy disciplines, namely environmental policy and spatial planning.

It has taken far longer than usual to bring this book to publication. Given that it takes, on average, a couple of years to bring out a book, one can imagine how long this particular process has taken. The process began with a request from the Dutch Ministry of Housing, Spatial Planning & the Environment (now part of the Ministry of Infrastructure & Environment). The report that was compiled in response to the Ministry's request was considered by all parties at the time to be of sufficient interest to warrant publication for a wider audience. We are extremely grateful to the Ministry for supporting us in rewriting the text of the report for publication as a book, and in having it translated into English. In particular we would like to thank Jan Jaap de Boer, Peter Kiela and Hans Verspoor, all from the Ministry, who kept faith in the project over the years.

One reason this all took so long was that Jelger Visser, one of the authors, fell ill and was unable to continue participating in the project. It must be quite a surprise for him to see the book completed at last. We thank him immensely for leading the project during the first couple of years, and we sincerely hope we have done what he expected of us to complete the book. A crucial link in the chain has been Yvette Mead of the University of Groningen Translation and Correction Department, to whom we could send bits and pieces which she converted without hesitation into proper English for us. Thanks Yvette, for all you've done through all those years. Our thanks go also to Koen Klieverik and Rens Baltus for providing logistic support during the project. Professor Donald Miller, the series editor, deserves a 'thank you' for embracing this work and accepting it as part of the 'Urban Planning and Environment' series. Last but not least, very warm thanks go to our publisher at Ashgate, Valerie Rose, who somehow has unshakeable confidence in whatever we propose. We do hope this project will justify that confidence too.

Gert de Roo
Christian Zuidema
Groningen, September 2011

Chapter 1

Smart Methods: Methods in a Changing Environmental Policy Climate

Smart Methods for Environmental Externalities is a book totally dedicated to innovative initiatives generated in the environmental policy and spatial planning arena in the Netherlands. Over the years, and since approximately 1985, various methods have emerged relating to the effects of environmental externalities on urban development. The result is a rich and wide range of methods that take into account a variety of aspects relating to environmental externalities. On the one hand, these wide-ranging methods together constitute a wonderful toolbox for policymakers, spatial developers and government officials, but on the other hand it is no longer obvious which method to choose. Therefore, this book not only presents the variety of Dutch methods for environmental externalities but also proposes a categorization for the methods that is clear and coherent, and will be considered useful in selecting methods for a specific issue.

The categories for methods for environmental externalities are presented in Part B of this book. The logic behind the categories requires a brief explanation. The Dutch methods for environmental externalities are, to a certain extent, a direct response to policy practices. The methods are tools for making policy practices visible and workable, and for translating environmental policy directives into spatial consequences. The methods for environmental externalities therefore reflect the changes that have taken place in environmental and spatial policies.

In the 1980s, environmental policy directives were driven by top-down, quantitative standards, constraining spatial developments in order to guarantee a healthy local environment. Environmental standards were used to physically separate environmentally intrusive and environmentally sensitive functions, thereby ensuring a safe distance between residential areas and industrial sites. The same applies to housing versus traffic and infrastructure. The first methods for environmental externalities therefore focus strongly on setting conditions, building on environmental standards and presenting their spatial consequences.

In the early 1990s, almost ‘hand in hand’ with planning theory – which underwent a communicative turn in response to a failing technical-rational approach to planning – the focus of environmental policy in the Netherlands shifted from top-down and technically driven policy to policy that took account of local conditions. This shift resulted in the decline of the environmental standard in Dutch policymaking. We see instead the rise of communicative approaches, area-specific and tailor-made policymaking and the decentralization of responsibilities and initiatives. With this shift, environmental issues no longer constrain spatial

developments but should contribute to more sophisticated approaches, integrating the spatial, infrastructural, social and environmental aspects of a specific location.

The methods for environmental externalities have evolved accordingly. The evolutionary path will be elaborated upon in Part A of this book. While Dutch environmental policy is no longer the inspiration to the world that it once was, and in the light of the considerable uncertainty as to how Dutch spatial policy should move forward, the Dutch methods for environmental externalities still stand, and are used and tested under various conditions. The result is a range of methods that, together, constitute an excellent toolkit from which the 'right' method can be selected to tackle a situation involving environmental externalities, whatever that situation might be. There are methods for dealing with straightforward, relatively simple environmental-spatial conflicts, methods for dealing with complex environmental-spatial conflicts, and methods that can be used in the most chaotic of conflicts that are overly complex due to the opposing interests of numerous stakeholders and to the intangible 'jumble' of intrusive and sensitive functions in the urban environment. It is this range of methods and its internal coherence that are reflected in the title of the book, *Smart Methods for Environmental Externalities*.

1.1 Prologue: An Emerging Policy Field¹

In 2001, the Dutch cabinet presented the policy document 'Where There's a Will There's a World. Working on Sustainability'. This document, the fourth National Environmental Policy Plan (NEPP-4), deals with more than environmental policy for the coming years. It also assesses thirty years of environmental policy in the Netherlands. During that time, environmental policy was developed from scratch. The message is clear: a great deal has been achieved, but there is still a long way to go. NEPP-4 identifies seven persistent environmental problems that the policy has not yet come to grips with. These vary from global climate change to negative impact on the quality of the living environment. In order to solve the last problem, NEPP-4 proposes a reform of policy on the living environment. This policy reform means that other levels of government 'will be afforded greater freedom and as much integrated responsibility for the local living environment as possible, including the related instruments' (VROM 2001; 329).

An important step in that direction was taken on 13 May 2004. The MILO method was presented at the conference 'Kwaliteit van de leefomgeving' (Quality of the Living Environment).² The audience included environmental officials and spatial planners from municipal and provincial authorities, local and regional

¹ This section is a survey of the development of environmental policy in the Netherlands. Chapter 2 deals in more detail with the different periods in environmental policy and their significance for methods for environmental externalities.

² MILO is the Dutch acronym for 'Environmental Quality in the Living Environment'. The MILO method is a joint project of the Ministry of Housing, Spatial Planning and

environmental agencies and water boards. MILO is a practical method that will enable them to improve liveability and the quality of the environment. It is definitely not a blueprint but ‘a tool and source of inspiration for policy practice’ (VNG et al. 2004; 5). There was a good reason why this policy practice was the source of inspiration for the tool: rather than following national programmes, policy proposals are shaped by local circumstances. MILO builds on practical experiences with methods – referred to in this book as methods for environmental externalities – that can be used to streamline the harmonization of the environment and spatial planning.

MILO is certainly not the only method developed to support local and regional environmental policy and integrated environmental policy. Over the years, various organizations in the Netherlands³ have taken the initiative to develop their own methods, so that the range now available is extensive and above all diverse. As a result, the Netherlands has established a unique position in the world, both in terms of environmental policy and methods for environmental externalities.⁴ This book is about spatial methods regarding environmental health and hygiene and is intended to serve as a guide to selecting a suitable method for aligning planning activities and the quality of the living environment.

MILO is clearly a product of today. The ‘area-specific approach’, ‘quality ambitions’ and ‘area types’: these are all MILO concepts that were not yet used in the early years of Dutch environmental policy. After a period of social and political awareness, in which the publications *Silent Spring* by Rachel Carson (1962), the renowned report by the Club of Rome (1972), and the UN environmental conference in 1972 played a role, the environment was suddenly high on the agenda. In the early period, this was reflected above all in the cleaning-up of the largest and most serious forms of environmental pollution. In Urgency Policy Document on the Environment⁵ of 1972 – seen by many as the beginning of environmental policy

the Environment (VROM), the Association of Netherlands Municipalities (VNG), the Interprovincial Council (IPO) and the Association of Water Boards (UVW).

3 The Netherlands Ministry of Housing, Spatial Planning and the Environment is not the only body actively involved in developing this type of method. Local and regional authorities and environmental services have also developed several methods. A detailed overview can be found in the *Kennisboek Milieu in stedelijke vernieuwing* (VROM 2002) and on the SenterNovem website (Senternovem 2007).

4 Developments in Dutch spatial and environmental policy are followed with interest in various parts of the world. In Japan there is even a Study Group for Dutch Spatial Planning (De Roo 2002; 16). The Netherlands is apparently an example for other countries to follow. This role is reflected in the transformation of a Dutch environment-aware method in the United States. This will be discussed later in the chapter.

5 The document is characterized by the fact that it dealt only with environmental nuisance and environmental contamination. In particular, the Urgency Programme in the policy document reveals the close relationship to public health: environmental problems are only regarded as such if they constitute a risk or potential risk to public health.

in the Netherlands – the Biesheuvel cabinet still believed that this clean-up policy would take only five to ten years. In practice, however, this proved too optimistic.⁶

In the early years of environmental policy in the Netherlands, the belief in the ‘makeability’ of society was still evident.⁷ The prevailing line of thinking was that tightly coordinated government intervention could fundamentally improve society. It is also one of the ideas that shaped the early development of environmental policy. It is reflected in the Urgency Programme of the Urgency Policy Document on the Environment: ‘In the coming period, priority will be given to extending statutory measures’⁸ (VM 1972; 23). The publication of the policy document on ambient environmental standards (*Nota milieuhygiënische normen*) laid the foundation for the current interpretation of the concept of ‘environmental quality’. Generic environmental standards were seen as the instrument that would give shape to environmental policy, and the mechanisms of the first methods for environmental externalities are largely based on this concept of quality.

Under the later – more moderate – cabinets of Van Agt, belief in the makeability of society began to erode. Results were not achieved as easily as was assumed in the Urgency policy document. Society is only makeable to a certain extent. As the belief in makeability faded, there was greater interest in more integrated approaches in environmental policy. The State became convinced that it should approach environmental issues in relation to each other, rather than pursuing a compartmentalized policy of remediation. However, it took some time before this was put into practice.

The ‘maturing’ of environmental policy went hand in hand with the development of instruments to give shape and structure to it.⁹ In the early years of environmental policy, it was usually environmental standards that were embraced as the solution to environmental issues. The realization gradually dawned that ad-hoc approaches to urgent environmental issues would cause environmental policy to become compartmentalized. In the mid-1980s there was a shift of emphasis in environmental policy, and the remediation approach was partly abandoned. The shift was a result of the wish to align the various policy lines. In the Environmental Policy Integration Plan (PIM; *Plan Integratie Milieubeleid*), integration is seen as a condition for effective policy. The principles of this plan proved to be highly

6 Even now, issues still regularly come to light that were seen thirty years ago as the goal of remediation policy (see e.g. Schmit 2005).

7 The belief in a makeable society is largely a concept of socialism and social democracy. In the environmental policy of Den Uyl’s Labour (PvdA) cabinet, it was mainly expressed in the desire to control and manage environmental issues by means of technical measures.

8 The policy document on ambient environmental standards (*Nota milieuhygiënische normen*) set out the relevant standards for environmental policy. The document distinguishes between different types of standard, including *quality standards*. It is these standards, which relate to the physical condition of an area, that have consequences for spatial planning.

9 Before environmental policy took on a structural form, the Nuisance Act (*Hinderwet*), which dated back in various forms to before 1875, was the only policy instrument for minimizing environmental nuisance.

decisive for the developments in environmental policy.¹⁰ The shift also placed other demands on the instruments for supporting environmental policy. Hence the need arose in this period for methods that would make it possible to harmonize environmental and spatial considerations in practice. The 'Compact City' spatial-planning policy,¹¹ in which spatial and environmental objectives increasingly clashed,¹² undoubtedly contributed to this need (Bartelds and De Roo 1995).

The response to this was *area-specific environmental assessment methods*. Perhaps the most widely known of these is the environmental zoning method¹³ of the Association of Netherlands Municipalities (VNG). In 1986 the VNG compiled a list of almost every type of business and the recommended distance between the companies in question and a quiet residential area. The aim of the VNG was to provide a practical tool to help policymakers plan for environmentally harmful functions. The method was a success, and the fourth version is now available (VNG 2007).

However, the way in which the original VNG method was structured leaves little room for nuance and consideration. This means that it cannot be used in complex situations involving large-scale enterprise and several sources of environmental burden. The VNG method is a welcome tool for relatively straightforward situations with clear causes and consequences. One of the reasons that Integrated Environmental Zoning (IMZ; *Integrale Milieuzonering*) was introduced in 1989 was to compensate for the shortcomings of the VNG method. The IMZ method was designed to produce an integrated contour of environmental load around an area with large-scale, multiple sources of environmental load. The method classified and standardized various types of environmental load. This made it possible to compare them and, using a cumulation method, 'add up' the loads to obtain an

10 The first National Environmental Policy Plan (NEPP-1; TK 1989) built on the principles set out in 1983 in the PIM (VROM 1983). This relates mainly to internal coordination. The stimulus for external integration (i.e. coordination between environment and spatial planning) was largely missing.

11 The concept of the compact city was introduced at the end of the 1970s as a solution to the increasing environmental pressure on rural areas (Bartelds and De Roo 1995). It soon became apparent that the proposed solution – the concentrating and combining of functions in cities – led to increasing pressure on the environment in urban areas.

12 The term environmental/spatial conflict was introduced to describe these situations. Originally, this term referred to conflicts between industry and residential developments (Borst et al. 1995), but it is generally used for 'issues of environmental quality and the spatial planning in an area or location that conflict with each other in some way' (De Roo 2001; 7).

13 Environmental zoning focuses on environmentally sensitive or environmentally harmful functions. In the case of environmentally sensitive functions, zoning is designed to protect quiet residential areas or nature conservation areas, for example. The purpose of zoning is to control the impact of these functions in an acceptable way (VNG 1999). In addition, zoning creates certainty for businesses: they can continue to operate within the specified environmental zone.

integrated value for actual situations. Although the term ‘integrated’ suggests otherwise, the IMZ method is the classic product of a time when standards-based thinking was seen as the only route to success. Tensions between centrally imposed environmental standards and the possibilities for spatial development at local level are partly to blame for the fact that the method never progressed beyond the ‘provisional system’ stage.

The supposedly destructive character¹⁴ of the IMZ method and the discussions relating to it undoubtedly contributed to the shift in environmental policy that took place in the mid-1990s. Standards, which were still embraced at the beginning of the 1970s as the solution to environmental issues, are no longer sacred (compare e.g. De Roo 1999). Environmental quality is no longer expressed only in quantitative standards but is more often described qualitatively in terms of liveability. A similar shift can be seen in the methods for environmental externalities developed in the second half of the 1990s. The Rotterdam method ‘Milieu op z’n Plek’ (A Place for the Environment), for example, is based on an environmental commitment in the form of a locally formulated minimum required quality and a target quality (Municipality of Rotterdam, 1998). Environmental standards are still used, but in a less restrictive and prescriptive way; the standards serve as a guideline. A similar approach is used in the later LOGO¹⁵ and MILO methods.

The shift in environmental policy described above led to a change whereby central frameworks were replaced by greater policy freedom at local level. Local authorities were given more opportunities and greater responsibility with regard to policymaking for the living environment. These developments are categorized under the heading ‘decentralization’ (Kamphorst 2006, De Roo 2004), making it possible – as Secretary of State Van Geel claimed at the aforementioned ‘Kwaliteit van de leefomgeving’ conference – to formulate ‘an ambitious and attractive environmental policy’ (Van Geel 2004).

We have now sketched the development of a policy field that has been in almost constant flux from the start. In that time, priorities have been continually adapted to the circumstances in which the Dutch government found itself. This has produced not only a colourful mosaic of approaches in environmental policy,

14 If planning consequences were to be linked to the IMZ method, large parts of the Drecht cities and Arnhem, for example, would have to be demolished. Yet the method is not always as negative as it is often presented. If it is applied in a different way, i.e. in a less prescriptive and more informative way, it certainly has potential. We will discuss this in Chapters 4 and 6.

15 Like MILO, LOGO (the Dutch acronym for Local Area Typology and Quality of Life) is a typical product of its time. LOGO was developed by the Environmental Services for the Rijnmond region based on experiences with the Rotterdam ‘A Place for the Environment’ method (DCMR Milieudienst Rijnmond 2004). Although there are clear differences between LOGO and the original MILO method, LOGO was the model for the further development of MILO. This will be discussed in Chapter 8.

but also a diverse collection of methods for environmental externalities. And the developments continue.

1.2 A Changing Policy Field: Decentralization

Environmental policy in the Netherlands is currently undergoing several visible changes. These changes can in fact be categorized under the heading 'decentralization'. Decentralization involves the transfer of responsibility – in this case with regard to the quality of the environment at local level – from central government to lower levels of government. It is a process that is being driven by discussions regarding the central role of the Dutch government, and for which several reasons can be given. De Roo cites the current aversion to regulatory zeal as one of the main motives. In fact, this is such an important motive that 'energetic efforts are being made to break down the existing generic and restrictive policy' (2004; 1). But breaking down the existing policy frameworks will also destroy the certainties that go with them. This is certainly the case if it is not clear where developments are leading, as several authors have pointed out (e.g. De Roo 2004, MNP 2004, Kamphorst 2006, Bouwer 1998).

In his consideration of the future of environmental policy in the Netherlands, De Roo (2004) expresses reservations about the decentralization process. He believes that there is too little control over the process, which means it is not possible to predict the position of environmental policy within the broader policy for the living environment. The Netherlands Environmental Assessment Agency (MNP) has also expressed concerns about current developments. Those concerns relate mainly to the use of new definitions of quality and the lack of related quality objectives that are uniform and measurable (MNP 2004). It also points to the dangers of an 'invisible environmental policy within a broader comprehensive environmental policy' (Kamphorst 2006, Bouwer 1998), whereby it will not be possible to defend environmental interests sufficiently in spatial planning processes. Van Geleuken and Baartmans warn that, in the discussion on centralization, 'little attention is paid to instruments and mechanisms that encourage local authorities to improve the quality of the environment' (2004; 30).

This climate, in which there are no policy certainties and the consequences of policy shifts for future policy are unclear, will undoubtedly affect the development of methods for environmental externalities. At the same time, however, new perspectives are emerging. New rules for local environmental policy can also lead to a situation in which methods for environmental externalities are used in a different way than their designers originally intended. An illustration of this is the transformation that the IMZ method, so maligned in the Netherlands, has undergone in the United States. Primarily a top-down method in the Netherlands,

IMZ (known in the United States as the BAEL Profile)¹⁶ has been adapted so that its main purpose is to provide non-governmental parties with meaningful information about the current environmental situation, without this necessarily having planning consequences. The information, so the theory goes, can contribute to ‘communicative action’ by organized interest groups and groups of citizens in their quest for improved liveability.¹⁷

1.3 The Importance of Methods for Environmental Externalities

It is evident that methods for environmental externalities are essential to Dutch environmental policy. The timely integration of the environment in the (spatial) planning process can help to find an effective solution for issues or to improve liveability for local communities. Methods for environmental externalities have proved a valuable instrument for this in recent years. This is borne out by the number of methods for environmental externalities and the practical experiences with these methods. In terms of substance, these methods can help to give environmental interests a useful and therefore fully acknowledged place in the spatial planning process.

It is not only in the past that spatial planners have seen the environment as restrictive and constraining. Research has shown that today, too, the spatial planning sector is somewhat suspicious of environmental issues (Spreeuwers et al. 2007, Bouwman et al. 2005). This can be changed if the right environment-aware method is used at the right time. Environmental interests are no longer a sideline issue; they are part of a shared responsibility. The environment can play a constructive role in the spatial planning process,¹⁸ and high-quality solutions to environmental issues can be developed. We must not lose sight of the fact that a high level of environmental quality can make a real contribution to a positive, healthy quality of life. And on all fronts there are benefits to be had from methods for environmental externalities. Practical experience with a number of methods has shown, for example, that lines of communication between the various actors

16 This method is used to involve citizens in local environmental policy. Elsewhere in the United States too, projects that use such methods are being set up on a bottom-up basis. In Seattle, for example, a method known as Sustainable Seattle (Seattle Planning Department 1994) is in use. Sustainable Seattle is a non-government programme designed to enable the local population to become involved in improving the quality of life in the area. One part of the programme is the City of Seattle Indicators Project, the aim of which is to develop indicators for liveability in the region. A number of these indicators can be found in local-government policy documents (Miller 2004), which shows how influential this method is.

17 This phenomenon will be discussed in Chapter 9, along with ‘environmental atlases’.

18 In 2003, the Haaglanden urban region developed a method called MIRUP (the Dutch acronym for Environment in Spatial Planning) in which environmental considerations are central to the planning process. The method provides ‘a content-related and process-based foundation for all manner of sustainability aspects’ (Stadsgewest Haaglanden, 2003; 5).

can be shortened considerably in comparison to similar situations in which such methods are not used. Actors from different backgrounds can suddenly ‘speak the same language’ if they all consider the issue using the same method.

Recent developments relating to the City & Environment approach are interesting in this context.¹⁹ In 2006, the interim City & Environment Act came into force, opening up the approach to all municipalities in the Netherlands. For example, local authorities can now relax environmental regulations – under strict conditions. Environmental standards are no longer prescriptive in all situations but are a guideline from which authorities can deviate if they give good reasons. Methods for environmental externalities can be used to substantiate the arguments that should lead to approval or rejection of the relaxation. The MILO method even stipulates the relationship that needs to exist between MILO and City & Environment in order to substantiate deviations from environmental standards (VNG et al. 2004).

In addition to the above examples from policy practice in the Netherlands,²⁰ there is another development that underlines the importance of methods for environmental externalities. The environmental policy of the European Union is becoming increasingly important in the national policy of the individual Member States (see e.g. Van Ravesteyn & Evers 2004). This relates not only to the influence of the various directives,²¹ but also to the European focus on the urban environment. As a follow-up to the Sixth Environment Action Programme of the EU, the ‘Thematic Strategy on the Urban Environment’ has been developed. The strategy emphasizes the importance of sharing knowledge and best practices EU-wide in the field of urban environmental management. The Dutch ‘best practices’ (read: methods for environmental externalities) summarized in this book are in line with this strategy.

The above illustrates the value of methods designed to support local or regional environmental policy and of methods that facilitate the alignment of environment and spatial planning. Dutch initiatives in local and regional environmental policy

19 The approach has three steps: tackling problems at source, creative solutions within the law, and relaxing the rules. In the period from 1997 to 2004, 25 local authorities in the Netherlands experimented with the City & Environment approach (see also VROM 2003a). An evaluation study has shown that the approach can contribute to a more economical and effective use of the spatial environment (VROM 2004), which means that a more liveable environment is within reach.

20 Support for the City & Environment approach has been discussed above. But there are numerous other ways in which methods for environmental externalities can play a role. Examples include the Strategic Environmental Assessment (SEA) or MER Plan providing for the timely analysis of the environmental impact of plans or programmes (VROM 2004a).

21 Strategic Environmental Assessment, mentioned above, is also the result of a European directive, namely 2001/41/EC, which came into effect on 21 July 2004. The purpose of the directive is to ensure that Member States identify and assess the environmental consequences of certain plans and programmes in advance.