



## A next step for sustainable urban design in the Netherlands

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### ABSTRACT

The Dutch Working Group on Sustainable Urban Development has recently delivered its publication *Sustainable Urban Design, The Next Step* (Meijer & Dubbeling, 2010). The book (to be referred to here as *The Next Step*) includes six examples of sustainable urban design and three major essays. The Working Group is a broad group of experts from the Dutch professional societies for urban designers and planners (BNSP) and landscape architects (NVTL). (The working group consists of urban designers, urban planners and landscape architects from the Netherlands.) It seeks to take the thinking and practice of sustainable urban design a step further: from sustainable urban design to sustainable spatial development. This paper explains this next stage which has been developed through a review of the literature, the inputs of the Working Group and the lessons learned from the case studies described in the book. Although the case study projects are sometimes more than 12 years old and are rooted in a specific Dutch societal and spatial context, they provide interesting, even up to date, insights for the planning of sustainable and durable cities. They are also compared to some projects in other European countries.

This paper looks at why a renewed approach to sustainable urban design is both necessary and rewarding. It then turns to the renewed approach and putting it into practice. Based upon the case studies, new possibilities for the design of sustainable and durable cities are highlighted.

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### Introduction

Support for sustainable urban design has become more widespread in recent years and topics like liveability and clean energy attract considerable attention. The Dutch Government has set ambitious climate goals, local authorities are working on sustainable neighbourhoods and interest groups are fighting for cleaner air. The importance of social vitality in the city has been put back on the map by the 'priority neighbourhoods' policy, and the wish for a more robust Netherlands is embodied in a plan for the Randstad in 2040 (VROM, 2008) and a 'second Delta Plan' for climate-proof water management (Deltacommissie, 2008).

Despite this momentum, though, the results in the field of sustainable urban design have been disappointing. Urban developments in general are neither durable nor sustainable, there being few examples of completed sustainable urban design projects. In theory, urban planning and design are fields where much progress can be made (Kenworthy, 2006). However, while the required expertise and technologies are available, they are put to little use. Between 2007 and 2010, the Working Group on Sustainable Urban Development has developed a new and more appealing approach to sustainable urban design and putting it into practice. In

this approach, sustainable urban design should evolve to sustainable spatial development. The new goal is to incorporate eco-effectiveness in sustainable urban design and to extend this as the natural approach to spatial planning at all levels (see paragraph 3 below for further detail). Using terminology coined by John Elkington, the Working Group is convinced that the benefits of sustainable spatial development will span 'People, Planet and Profit.'<sup>1</sup>

*The Next Step* contains numerous quotations that are attributed to Working Group members expressing their professional opinion. We use these quotations from the book (Meijer & Dubbeling, 2010, pp. 29–48) in the following paragraphs to explain our idea. 'Only a few good examples of sustainable urban design can be found [in the Netherlands MM],' argues urban planner and working group member Olga van der Linden. 'Few new projects have been completed since the publication of the first good practice book in 2005 (Adriaens, Dubbeling, et al., 2005). Sustainable urban design has not yet become standard practice in spatial development.' Landscape designer and spatial planner Michaël Meijer adds: 'In Dutch planning, sustainability often amounts to no more than bolting on some environmental measures or energy saving techniques in buildings. Our planning processes could deliver much more.'

<sup>1</sup> Coined by John Elkington, discussed in his book *Cannibals With Forks* (1988). At the 2002 World Summit on Sustainable Development in Johannesburg the 'P' for Profit was changed into Prosperity to bring social benefits into the equation alongside economic benefits. We use the accepted word 'profit' because of its clarity and familiarity.

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Urban planning and design, landscape architecture and regional planning can make a much bigger contribution.'

### Opportunities for sustainable urban design

As the new publication states 'The attention given to climate change and the emergence of new concepts like 'CO<sub>2</sub> neutral' mark a change in attitudes to sustainability: 'have to' is giving way to 'want to.' Regulations still focus too much on standard setting and too little on goal getting, while the market is getting wind of the added value of sustainability in development projects.'

'Society is changing,' says spatial planner Femke Adriaens. 'Awareness that things must change has grown since Bill Clinton and Al Gore and the Intergovernmental Panel on Climate Change put climate change in the spotlight.<sup>2</sup> We can see the consequences of extreme weather on the news every week. The threat of climate change is making people more aware of their own role, and that is rapidly pushing up demand for alternatives. What is new is that sustainability is now not being presented as an obligation, but as something positive, desirable and cost-cutting.'

This positive approach has also embraced the low-income neighbourhoods or 'rough areas,' as policy makers have chosen to build on their strengths. In other areas, too, politicians seem to be thinking more about sustainability. Urban planner Jan Bredenoord: 'Sea level rise is a global phenomenon, but most action is taken at the national and regional scales. The real solution to the climate problem, of course, lies in taking action across all scales: from the UN level and Europe down to local authorities, civil organisations and citizens. Everyone will have to play their part in the transition to clean and sustainable energy generation.'

Landscape designer Steven Kamerling calls on the legislature to think more about sustainable urban design: 'Topics like water and ecology are covered by laws and procedures, which means they have to be considered when planning new developments. It would be good if sustainable urban design was also included in planning legislation and procedures.' It is worth noting that setting targets at the beginning of a development process gives better results than setting standards later on. Current regulations are far too rigid to be able to respond to the dynamics of spatial development, while new technologies and building forms tend to fall foul of the Buildings Decree, delaying the progress of sustainable projects, which in turn get a reputation for being difficult. Reviewing and monitoring targets, in which government authorities create the right conditions for sustainable area development, leaves more room to actually realise sustainable solutions than continually setting new standards and keeping the old ones.

Market players are also showing more interest in sustainability. 'Mostly they are interested in energy savings in individual buildings,' says urban designer Martin Dubbeling. 'Considerable environmental gains can still be made at the higher scale of urban planning, but the search for benefits for People, Planet and Profit is definitely underway. Sustainability is 'in' and money can be made from it. Sustainable urban design has come to be seen as an opportunity and an added value, an extra layer of development. This positive attitude breeds commitment. There is a real desire for sustainable development to succeed, not because it has to, but because it can succeed, it is economically prudent, and because we really want it to.' It seems there is enough support to carry sustainability 'from an undercurrent to a groundswell for development,' in urban and regional planning too (Rotmans, 2007).

The Working Group sees the upsurge of concepts like 'CO<sub>2</sub> neutral,' 'climate proof' and 'cradle to cradle' as further evidence of current support for sustainability in the Netherlands. Urban planner Hein Struben: 'Government authorities and multinationals are picking up on these concepts. Almere and Venlo municipal councils, for example, have made the 'cradle to cradle' philosophy one of the principles underlying their spatial development policies. But these types of concepts have to be translated into concrete objectives and spatial designs, which is often a laborious process. Skilled designers have a part to play.'

### Highlighting the aim

Putting into practice sustainability is a variable exercise. Thus, at this point in time the focus is on the pursuit of efficient measures, that is to say on interventions causing less waste or consuming less energy. Gradually this approach will, however, have to make way for the pursuit of effectiveness: working at a truly sustainable final result, without any obstructions along the way. So, not focusing on the emission of less CO<sub>2</sub>, but on the development of an energy-neutral city. This is something that can only be achieved in an integrated manner.

Sustainability revolves around realism, principles and values, all aimed at placing man in an appropriate role within the earth's cycles as well as at a fair distribution of prosperity. In striving for more sustainability, we have often taken advantage of people's guilty conscience by emphasizing pollution and the squandering of resources. Still, neither feelings of guilt nor austere living hold very much appeal for the masses today and indeed even lead to disinvolvement. In spite of this, the value of sustainability is widely endorsed, as people are becoming aware that this way one may also cut costs or make money. This awareness is still growing, based on the proof of successful projects. It is the key for integrating sustainability in the mainstream planning and design process and the starting point for the discovery of the joy of developing 'something good' by the masses. This new fundamental attitude clears the way for a novel approach to sustainable urban design. It is a positively charged approach that is indeed feasible, besides being beneficial for people planet and profit.

True benefits as regards people, planet and profit come within reach when efforts shift from efficiency to (eco-)effectiveness.<sup>3</sup> Spatial planner Peter Smit: 'Making a house more energy-efficient is an efficient intervention, but a low-energy home still uses electricity and gas and so contributes to climate change. A neighbourhood that produces energy is an effective development, because no fossil fuels are needed and there are no CO<sub>2</sub> emissions.'

Also in urban development there are examples of effective solutions. Landscape architect Jeroen de Vries: 'When redeveloping urban districts, we can see to it that food and energy are produced there, that neighbourhoods are 'life-cycle-proof' and that they purify water and air. And do not forget the use of renewable raw materials and the promotion of clean transport systems. These are effective solutions to the current problems of food and energy production and to the quality of life and health problems. By linking together industrial and other activities in materials and energy cycles, we can make use of residual waste streams. It is a question of closing recycling loops, of a smart lifecycle management - both on the site and in relation to the wider environment' (see Fig. 1). Together this will amount to a liveable and durable low carbon city or, in time, even to a energy neutral city.

The connections between, for instance, energy and climate problems, and the large scale on which they occur, require an

<sup>2</sup> Bill Clinton launched the Clinton Global Initiative, Al Gore made the film *An Inconvenient Truth*, and the Intergovernmental Panel on Climate Change (IPCC) issued its fourth report: *Climate Change 2007*. Gore and the IPCC shared the 2007 Nobel Peace Prize.

<sup>3</sup> Braungart and McDonough (2002) work with the terms 'eco-efficient' and 'eco-effective'. Architect Walter R. Stahel (1982) introduced this way of thinking in Europe with his idea for a circular economy.

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