Environmental Law Tools for the Idea of a Compact City. Learning from the Dutch Case



Marlon Boeve

1 Introduction

Sustainable urban development has long been recognised as an important policy aim on the international, European and national levels.¹ One of the goals of sustainable urban development is to minimise urban sprawl in order to limit the environmental effects and the loss of biodiversity outside the urban area. This implicates a concentrated urban development with a focus on the redevelopment of existing urban sites. Yet sustainable urban planning also means 'a good quality of living' in the cities with room for urban green (open) spaces and with a balanced mix of land use (housing, recreation, shops, offices, etc.). This concept can also be referred to as the idea of the compact city.² Essential, though, for this concept is on the one hand creating space for new urban developments and on the other hand securing a high environmental quality in the cities. However, the concentration of activities in the restricted urban area could lead to an accumulation of environmental problems. This can cause tension between urban spatial development and environmental protection. Unlike in traditional environmental law, the environmental issues within the compact city cannot be solved by keeping distance between intrusive activities and environmentally sensitive areas like new residential areas.

M. Boeve (⊠) Utrecht Centre for Water, Oceans and Sustainability Law, Utrecht University, Utrecht, The Netherlands e-mail: m.n.boeve@uu.nl

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¹See (for instance) Communication from the Commission, Sustainable Urban Development in the European Union: A framework for action, COM (98) 605 final and European Commission, Urban Agenda for the EU, https://ec.europa.eu/futurium/en/urban-agenda and UNEP (2018). ²OECD (2012), De Roo (2000) and Boeve (2017).

H. Ginzky et al. (eds.), *International Yearbook of Soil Law and Policy 2018*, International Yearbook of Soil Law and Policy, https://doi.org/10.1007/978-3-030-00758-4_5

Environmental law—especially environmental quality standards—is therefore sometimes seen as an obstacle to the realisation of the concept of the compact city.

This contribution addresses the question to what extent environmental law tools can support the idea of the compact city. First, the focus will be on European policy on this matter. Consequently, the Dutch case will be discussed as an example. At the European level, an integrated approach to urban management is advocated as a tool to achieve the idea of the compact city. Best practices are being developed throughout Europe. This article will zoom in on some Dutch examples of such best practices. In the Netherlands, with its densely populated territory, soil sealing and the resulting environmental problems have been an issue for a long time. The compact city concept was already introduced in the 1980s as a solution for the urbanisation of the countryside.³ Public authorities have been struggling to find an effective approach to create space for new developments in the existing urban area, without exceeding the governing environmental standards. Dutch environmental law was felt to be too rigid, and a variety of methods for more flexibility have been introduced. At first, instruments were implemented to relax the rules, meaning a deviation from limit values under strict conditions. Later, much attention was devoted to integrated approaches in which there is room for a 'per balance system'. The Dutch government is now working on completely restructuring environmental and planning legislation. In 2016, a new Environment and Planning Act (EPA) was adopted by Parliament.⁴ It is expected that this Act will enter into force in 2021.⁵ One of the key goals of the Act is 'more administrative discretion by means of an active and flexible approach in order to achieve objectives for the physical living environment⁶. The question is if this new system supports the idea of the compact city in a better way. Do the instruments of this new Act provide enough flexibility to achieve compact cities while still securing a high environmental quality?

The structure of this contribution is as follows. First, focus will be on how the concept of the compact city as a form of sustainable urban development is described in literature (Sect. 2), then we will briefly look at European Policy on this topic (Sect. 3). Next, this contribution examines the Dutch approach on the idea of the compact city (Sect. 4). The contribution ends with some concluding remarks (Sect. 5).

³E.g. De Roo (2000), p. 151.

⁴An English translation is available on https://www.omgevingswetportaal.nl/wet-en-regelgeving/ documenten/publicaties/2017/01/24/unofficial-translation-of-the-environment-and-planning-actand-parts-of-the-explanatory-memorandum.

⁵The government is now working on an Implementation Act and Implementation Decree amending existing legislation in line with the new act.

⁶Explanatory memorandum Environment and Planning Act (English version), p. 3. https://www.government.nl/documents/reports/2017/02/28/environment-and-planning-act---explanatory-memorandum.

2 The Concept of the Compact City in Literature

2.1 Concept

The compact city is a spatial planning concept aiming at an intensified and mixed use of land in the existing urban area, ensuring a high quality of life in that area.⁷ Transferring abandoned brownfields, military compounds, railroad yards or other urban waste land into a residential area; port-city development; and underground construction and high-rise construction are all examples of intensifying the existing urban area according to the concept of a compact city. Dantzig and Saaty are considered to have introduced the term 'compact city'.⁸ They proposed a city of high residential density and mixed land use. People should make more use of the so-called vertical dimension of the city: life in the city should be divided into layers (*the principle of space*). In addition, people should make use of the facilities of the city 24 h a day in order to use the available public space in an optimal way (*the principle of time*).⁹

It is not easy to define the concept of the compact city because there is not one clear model. The debate focusses particularly on the size of the compact city and the level of density.¹⁰ The compact city policy does not only apply to 'small' cities. Metropolitan areas can also be in fact a compact city.¹¹ Nevertheless, some key features can be deduced from the literature. A comprehensive international study of different compact city policies by the OECD (2012) describes the key characteristics of compact cities as follows: (1) dense and proximity development patterns (i.e., urban land is intensively utilised), (2) urban areas linked by public transport systems and (3) accessibility to local services and jobs (i.e., land use is mixed).¹² These key features show that the idea of the compact city is not only about densification but also about the mix of land use in order to realise a livable urban environment.

2.2 Goals

From the literature, several goals of compact urbanisation can be deduced. Most often mentioned are the optimal use of land resources (including the prevention of soil sealing), restricting automobile dependency and chances for an efficient use of

⁷Boeve (2017), p. 14.

⁸OECD (2012), p. 28.

⁹Dantzig and Saaty (1973).

¹⁰OECD (2012), p. 31; Lee et al. (2015), pp. 1054–1070.

¹¹An important notion is that the different urban agglomerations have to be linked together by public transport.

¹²OECD (2012), p. 28.

energy.¹³ A recent report of the UNEP—'the weight of the cities'—emphasises the importance of addressing the long-term trend of de-densification in the light of resource efficiency. Resource efficiency should be embedded in spatial planning. The report points out that there is evidence that 'higher density and compact urban forms can reduce greenhouse gas (GHG) emissions by a factor of two or more'.¹⁴ A report of the EEA on resource-efficient cities also stresses that the compact cities bring benefits such as the limitation of the need for artificial land and more resource and energy efficiency.¹⁵

Also, on the national scale, these advantages of compact urbanisation are recognised. Geurts en Van Wee concluded in a publication on thirty years of compact city policy in the Netherlands: 'without compact urban development policies, urban sprawl in the Netherlands is likely to have been greater, car use would have been higher at the cost of alternative modes, emission and noise levels in residential and natural environments and the fragmentation of wildlife habitats would have been higher'.¹⁶

In addition, social and economic advantages are mentioned in literature, like the possible increase of productivity as a result of a good accessibility and concentration of employment.¹⁷

Repeatedly, the disadvantages of the concept of the compact city are also mentioned.¹⁸ Noise nuisance, air pollution, etc. could locally increase as a result of a concentration of multiple economic activities. In a worst-case scenario, the increase of economic activities might actually lead to a decrease of 'green areas' in the compact city. Also, economic effects could appear, like shortage on the housing market as a result of the concept of sustainable urbanisation. In Sect. 4, we will elaborate on the obstacles in Dutch law for realising the concept of the compact city.

3 EU Policy

In several EU policy documents, the ambition to reach sustainable urban development is well reflected. Current EU policy on sustainable urban development aims to implement both the UN 2030 Agenda for Sustainable Development¹⁹ and the UN

¹³OECD (2012), p. 57; Fertner and Grosse (2016), pp. 65–79; Nabielek et al. (2012), p. 27.

¹⁴UNEP (2018).

¹⁵EEA (2015a), p. 53.

¹⁶Geurts and Van Wee (2006).

¹⁷OECD (2012), p. 57; Nabielek et al. (2012), p. 27.

¹⁸OECD (2012), pp. 69–75; Nabielek et al. (2012), pp. 27–31.

¹⁹UN, Transforming our world: the 2030 Agenda for Sustainable Development, https://sustainabledevelopment.un.org/post2015/transformingourworld.

Sustainable Development Goals (SDGs).²⁰ In particular, SDG 11, 'Make cities and human settlements inclusive, safe, resilient and sustainable', relates to urban sustainable development.²¹ This section describes briefly the European policy related to the concept of the compact city.

The 6th Environmental Action Programme (EAP) of the European Commission required the preparation of a Thematic Strategy on the urban environment. This Strategy was published in 2006 and aimed 'to contribute to a better implementation of existing EU environment policies and legislation at the local level' by promoting an integrated approach to urban management, inter alia by integrating environmental aspects into urban planning.²² The EU supported this integrated approach by offering assistance based on examples of best practice and financial support. However, the assessment of the 6th EAP in 2011 shows a worrying conclusion; the impact of the Strategy has been insufficient with respect to the objective of improving the quality of the urban environment. It recommends that the urban environment needs to be better reflected in policy development.²³ In the current 7th Environmental Action Programme of the EU, the support of sustainable development of urban areas is considered one of the priorities. In the programme, an integrated approach to urban and spatial planning is proposed, in which long-term environmental consideration next to economic and social issues are taken into account.²⁴ A great deal of effort will be put to the development of and consensus on criteria for urban sustainability. As a result, in 2016, an Urban Agenda for the EU was established by the EU Ministers of Urban Matters (the so-called 'Pact of Amsterdam').²⁵ One of the priorities of the urban agenda is 'Sustainable use of land and Nature-based solutions'. The combat against urban sprawl and the spread of low-density settlements are also a focal point of the EU policy on soil sealing. Soil sealing is defined as 'the permanent covering of an area of land and its soil by impermeable artificial material (e.g. asphalt and concrete), for example through buildings and roads'.²⁶ It has been identified as a serious problem in the Thematic Strategy for Soil Protection of the European commission.²⁷ In 2012, the European Commission drew guidelines that contain examples of 'best practices' to limit, mitigate or compensate soil

²⁰European Commission, Next steps for sustainable European future. European action for sustainability, COM (2016)739 final.

²¹See https://sustainabledevelopment.un.org/sdg11.

²²Communication on Thematic Strategy on the Urban Environment, COM (2005), 718 final.

²³The Sixth Community Environment Action Programme. Final Assessment, COM (2011)531 final, p. 6.

²⁴Decision 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet', (see no. 93).

²⁵Available via www.urbanagendaforthe.eu.

²⁶Guidelines on best practice to limit, mitigate or compensate soil sealing, SWD(2012) 101 final/ 2, p. 39.

²⁷COM (2006)231. See also the Roadmap to a Resource Efficient Europe, COM(2011)571 final.

sealing.²⁸ Central elements in these best practices are an integrated approach for the management of land and the development of regional approaches promoting the reuse of existing buildings or brownfield sites. To limit soil sealing through the reduction of land take, it proves beneficial to set targets of a binding nature or at least targets that are supported by a policy strategy with clear targets.²⁹ So far, this latter recommendation seems not to be implemented in the member states. An EEA report on resource-efficient cities (2015) states that issues crucial to urban planning, such as land take, are rarely addressed. Some countries have set out clear targets in this area. The report gives the example of the German National Sustainable Development Strategy 2002, which set the goal of reducing land consumption to 30 hectares a day by 2020.³⁰

There is no specific EU legislation on sustainable urban development. Nonetheless, existing EU legislation relates to and influence sustainable urban development. The Air Ouality Directive (2008/50/EU) sets limit values and targets at the European level. The directive requires member states to draw up (action) plans for agglomerations. These plans are linked to the exceedance of the air quality targets and limit values. Other directives, like the Noise Pollution Directive (2002/49/EU) and the Seveso III Directive (2012/18/EU), require member states to set environmental quality standards at the national level. The principle of subsidiarity³¹ leads to a reluctance to set environmental quality standards at the European level. This argument has, for instance, been used for not setting standards for noise and soil pollution at the European level.³² An important notice is that relevant EU legislation like the Noise Pollution Directive lacks an integrated approach for the urban environment. There are no provisions that ensure coherence between different policy areas. Only the Air Quality Directive includes a specific provision that requires member states to ensure that the air quality plans are consistent with (a.o.) plans required under the Noise Pollution Directive in order to achieve the relevant environmental objectives.³³

Additionally, in case industrial activities take place within the urban area, the Industrial Emissions Directive (IED) may apply.³⁴ The IED requires installations that fall under the scope of the directive to be regulated by a permit. Permit conditions, such as emission limit values, are set on the basis of the best available techniques.³⁵ Furthermore, the IED links the application of the best available

 ²⁸Guidelines on best practice to limit, mitigate or compensate soil sealing SWD(2012) 101 final/2.
 ²⁹Guidelines on best practice to limit, mitigate or compensate soil sealing, SDW(2012)101 final/2, p. 20.

³⁰EEA (2015b), p. 22.

³¹Art. 5 Treaty on European Union.

³²See COM(2011)321 def., p. 12 (noise). A proposal for a Framework Directive on soil was blocked by member states based on the principle of subsidiarity (PB EU C 153/3 and C163/15.
³³Art. 23 Air Quality Directive 2008/50/EU.

³⁴Directive 2010/75/EU of 24 November 2010 on industrial emissions.

³⁵Art. 11 IED.

techniques in permit conditions to the obligation to comply with environmental quality standards.³⁶ Article 18 IED reads: 'Where an environmental quality standard requires stricter conditions than those achievable by the use of the best available techniques, additional measures shall be included in the permit, without prejudice to other measures which may be taken to comply with environmental quality standards.' Compliance with environmental quality standards, like air quality standards, can be an issue in the compact city where different economic activities are concentrated. However, art. 18 IED leaves the member states discretion in the choice of measures. It may not always be necessary to establish stricter permit conditions when *other measures* ensure that an environmental quality standard is achieved timely.³⁷

4 The Dutch Approach

4.1 Managing Urban Growth: Ladder of Sustainable Urbanisation

In the Netherlands, spatial planning policy is presented in so-called spatial visions. These visions are made at the national, provincial and municipal levels and describe the expected spatial developments, as well as how they will be implemented.³⁸ The visions are internal guidelines for the government that has created the vision and are not binding on lower level governments.

Since 1983, national policy documents (or 'visions') for spatial planning have supported the compact city concept,³⁹ although the focus of the successive national policy documents has gradually shifted from regulations by the national government to regulation at the local level (so more weight to the discretion of local governments). This decentralisation process is already visible in the 'National Spatial Strategy' of 2006. This Strategy formulated national ambitions for the compactness of the urban area (the aim was to realise 40% of the total housing program in the Netherlands within the existing urban area)⁴⁰ but also promoted the delegation of authority to local governments. In 2012, the current national Spatial Vision on Infrastructure and Spatial Planning (SVIR) was established, which replaced the Strategy of 2006.⁴¹ Urbanisation policy is, according to this vision, no longer a national interest and should be carried out by local governments. There are no more

³⁶Art. 3 (6) IED defines 'environmental quality standard' as: 'the set of requirements which must be fulfilled at given time by a given environment or particular part thereof, as set out in Union Law'. ³⁷Van Rijn-Bogaart (2017), pp. 276–277; Boeve and Van den Broek (2012), p. 82.

³⁸Spatial Planning Act, art. 2.1–2.3 (available in Dutch at www.wetten.nl).

³⁹Boeve (2017), pp. 31–34; De Roo (2000), p. 152.

⁴⁰Parliamentary Papers II 2003/4, 29435, no. 2, p. 84.

⁴¹See for a summary in English of the SVIR: https://www.government.nl/topics/spatial-planningand-infrastructure/documents/publications/2013/07/24/summary-national-policy-strategy-for-infra structure-and-spatial-planning.

national ambitions for compactness given in this vision.⁴² However, the government in this vision stated that it still is responsible for ensuring a 'good system of spatial planning'. To support the functioning of the spatial planning system, a new instrument was announced in the SVIR: the 'Ladder of Sustainable Urbanisation'. The aim of the ladder is to encourage an efficient use of available space and to avoid excessive programming.⁴³ The ladder was implemented in the Spatial Planning Decree and entered into effect on 1 October 2012.⁴⁴ It requires local governments to include in the explanatory notes of local zoning plans the following argumentation: (1) whether there is a need for the intended new urban development and (2) if the zoning plan allows this new development outside the existing urban area, a justification why this new urban development cannot be realised within the existing urban area. In particular, the demand to explain why the intended development cannot be realised within the existing urban area matches with the concept of the compact city.

It must be emphasised that the 'ladder of sustainable urbanisation' is a 'soft' instrument in the sense that it's an obligation for an assessment in the explanatory note of the zoning plans. Nevertheless, in practice, the new requirement has brought an increase of research burden for establishing zoning plans that allow for new urban developments. Especially, the first period after the ladder had entered into effect, there still was a lack of awareness of the new instrument.⁴⁵ There have been a number of legal battles regarding the application of the ladder, concerning questions like whether the intended development is a 'new urban development' and if the area where the development is planned is an 'existing urban area', etc. Therefore, some argue that the implementation of the ladder in the Spatial Planning Decree has led to a 'juridification' of the spatial planning process.⁴⁶ Indeed, the necessity to implement the ladder in the Spatial Planning Decree can be questioned. It might have been sufficient to implement the ladder in policy documents (like the structural visions) to get the same substantive outcome. However, in my opinion, the ladder can also be qualified as an impulse for realising the idea of the compact city and can be seen as one of the instruments to combat urban sprawl.

4.2 Obstacles for Realising the Concept of the Compact City

Two main issues can be identified concerning the legal challenges for realising the concept of the compact city in the Netherlands. They both relate to the question of

⁴²In the European context this approach seems not to be an exception. See EEA (2015), p. 22 and par. 3 of this chapter.

⁴³English Summary SVIR, p. 14, https://www.government.nl/topics/spatial-planning-and-infra structure/documents/publications/2013/07/24/summary-national-policy-strategy-for-infrastructure-and-spatial-planning.

⁴⁴Spatial Planning Decree, art. 3.1.6 (2) (available in Dutch at www.wetten.nl).

 ⁴⁵Van Velsen (2016), par. 2.2. The 'ladder' is also simplified in 2017 by amending the provision.
 ⁴⁶RLI (2015), p. 31. See for an English summary of the report: https://en.rli.nl/sites/default/files/rli_2015-07_eng_1.pdf.

how to make room for new developments in the existing urban area without losing sight of the environmental quality in that area. In relation to the level of environmental quality to be achieved, the term 'environmental space' can be applied. It refers to the space that can be used without exceeding the governing standard.⁴⁷

The first issue concerns the influence of environmental quality standards on landuse choices. Environmental quality standards indicate the level of quality that must be reached by a specific component of the environment at a specific moment in time. These standards can be set at the European level, like standards for air quality,⁴⁸ or at the national level, like standards for external safety, noise pollution, odour pollution, light pollution and soil quality. Environmental quality standards can limit the available environmental space in the compact city and thus raise the question of the manner in which that space is distributed. An analysis of the Dutch environmental quality standards applicable in the urban area shows that the meaning of the standards for land-use decision-making differs, depending on the flexibility available for the local authority when applying the standard.⁴⁹

The standards for air quality in the form of limit values which must be met at a specific moment in time, are an example of standards that do not give the local authorities much room to deviate from the standard. Only a small degree of flexibility is allowed by the fact that the standards for a.o. NO2 and PM10 are expressed as annual averages. Temporary deviations from the level of the limit value are allowed as long as the average level remains under the (annual) limit value.⁵⁰ In addition there is some flexibility in how the standards are met (such as through a programme-based approach). Another example of standards with no room for deviation are the Dutch standards for external safety in the form of limit values.⁵¹

Dutch law does also provide environmental quality standards with a conditional room for deviation. Deviations from these standards in the form of target values are permitted under conditions which are sometimes formulated rather vaguely. For instance, deviation is possible only where 'important reasons exist'.⁵² Examples are the target values for noise, external safety and air quality.

In addition there are environmental quality standards relevant for urban land use decisions which leave the competent authority room to set its own standards at the local level. These include standards in the areas of soil pollution and light pollution. These standards are embedded in guidelines or circulars which have no legally binding status. Nevertheless, these standards often reflect the most recently accepted and environmentally-sound knowledge. Dutch case law of the Council of State shows that prudent decision-making requires the competent authorities to take account of these non-statutory standards.

⁴⁷VROM-Raad (2009), p. 16; Boeve (2017), pp. 16–18.

⁴⁸Air Quality Directive 2008/50/EU.

⁴⁹Boeve (2017), pp. 200–201.

⁵⁰Van Rijn-Bogaart (2017), pp. 192–193.

⁵¹Although under strict conditions a temporary exemption is possible.

⁵²Art. 5.2 (4) Dutch Environmental Management Act (available in Dutch at www.wetten.nl).

Although in many cases the spatial planning decision fits within the applicable legislation, the significance of environmental quality standard for these decisions is obvious. This is especially relevant with respect to the compact city, which aims to provide a concentration and mixed use of urban land. If the standards in the form of limit values cannot be met, they are an obstacle for projects in the existing urban area (projects that in the end contribute to a sustainable urban development and minimise urban sprawl). The old principle 'first come, first served' applies here. When the local authority has more room for deliberation between the intended urban development and meeting the environmental quality standard (e.g., with target values), research shows that this room is in practice often fully utilised without sound motivation.⁵³ There is no incentive to a dopt measures to keep the pollution as low as possible. This does not contribute to a high environmental quality in the compact city.

The second, related, issue is the limited number of options for environmental law tools and spatial planning tools to reduce (the emissions of) existing sources of pollution. After all, there often already are existing polluters in the compact city that place a demand on the environmental space in a specific area. To create 'environmental space' for 'newcomers' (e.g., housing buildings, shops, office buildings) in the compact city, it could be necessary to include additional measures in environmental permits of existing establishments. However, competent authorities may not always be allowed to include these additional measures because of the fact that in current Dutch law, there is no statutory basis for amendment of the environmental permit for planning reasons alone.⁵⁴ This means that the existing rights of the establishment cannot simply be limited to enable new developments in the environment of the establishment. At this point, Dutch legislation does not show chances for an integrated approach to urban (re-)development. Another issue that should be noted is that pursuant to case law of the Dutch Council of State, competent authorities are not allowed to amend an existing environmental permit significantly in relation to the original application of the permit.⁵⁵

The majority of the establishments in the Netherlands fall under the application of general rules of the Activities (Environmental Management) Decree. These establishments do not need an individual environmental permit. In principle, it is simpler for local authorities to limit the emissions of these establishments for spatial planning reasons. According to case law, individual requirements can be set to benefit future development in direct proximity of the establishment. A major limitation is that these requirements can be set only to the extent provided in the Activities (Environmental Management) Decree.

The spatial planning tools also show limitations when it comes to terminating or removing existing buildings or existing land use for the purpose of creating environmental space. There must be a reasonable prospect that they are being terminated

⁵³VROM-inspectie (2009).

⁵⁴Boeve (2017), pp. 208–210; Otten (2011), p. 450.

⁵⁵E.g. ABRvS 3 march 2010, ECLI:NL:RVS:2010:BL6194. Although the possibilities have expanded due to an amendment of the Dutch Environmental Act, see Boeve and Van den Broek (2012), p. 82.

within the planning period of the local zoning plan (10 years). If the landowner doesn't want to cooperate, the competent authority will likely have to proceed with a purchase or expropriation. These are costly and/or drastic measures, and many authorities might consider this only as a last resort. Yet more simple measures—like the requirement to put a roof over an existing open storage to create less dust in order to enable new urban developments in the environment of the storage—are also difficult to realise with spatial planning tools since it is not allowed to include such instructions in a zoning plan.⁵⁶

4.3 Flexibility: Instruments for an Integrated Approach

There are various developments in Dutch legislation in which more attention is given to the tension between environmental quality standards and spatial planning initiatives. The City and Environment (Interim) Act (2006),⁵⁷ the Crisis and Recovery Act $(2010)^{58}$ and the Rural Dwelling Act $(2012)^{59}$ all have implemented instruments for a more flexible approach by allowing local authorities to deviate from Environmental Quality Standards.

The City and Environment (Interim) Act is specifically designed to deal with issues of the compact city.⁶⁰ It aims at finding solutions for the stagnation of the development of urban sites. The Act allows local authorities to deviate from environmental quality standards using a three-step approach: step 1—tackling the environmental problems at the source, step 2—finding creative solutions within the law, and step 3—relaxing the rules, meaning a deviation of limit values under strict conditions. The scope of the Act is limited: it allows to deviate from limit values for noise, air and soil and from certain provisions on odour nuisance and ammonia in order to be able to provide for housing and small-scale commercial activities.⁶¹ According to evaluations of this 'city and environment approach' in most cases by the time the first two steps have been completed, a solution has already been found for the stagnating area development.⁶² In that sense, the three-step approach works as a 'carrot on a stick'. The last step, the deviation of limit values, is in practice only used for issues of noise.⁶³ The Act has various weak elements. For example, the

⁵⁶E.g. ABRvS 22 April 2015, ECLI:NL:RVS:2015:1231 and ABRvS 27 maart 2013, ECLI:NL: RVS:2013:BZ7483.

⁵⁷In Dutch: Interimwet stad-en-milieubenadering, Stb. 2006, 17 (available in Dutch at www.wetten. nl).

⁵⁸In Dutch: Crisis- en herstelwet (available in Dutch at www.wetten.nl).

⁵⁹In Dutch: Wet plattelandswoningen, Stb. 2012, 493 (available in Dutch at www.wetten.nl).

⁶⁰See also Boeve and Van Middelkoop (2010), pp. 18–20.

⁶¹Art. 2 City and Environment (Interim) Act.

⁶²E.g. Evaluatiecommissie Stad en Milieu (2004), p. 19.

⁶³That is not very surprising, it is for instance not possible for local authorities to deviate from limit values on air quality because of the European background of these standards.

deviation of limit values is only allowed if local authorities provide for compensation for the negative effects on the quality of the environment by improving the quality of the environment elsewhere. However, the criteria for compensation are quite broad and expressed in vague concepts: the compensation has to contribute to an 'economic and efficient use of space' and 'the highest possible living environment quality'.⁶⁴ This is undesirable; to allow for deviation from limit values requires, at the very least, a clear definition of the applicable conditions to that deviation. In addition, compensation for the deviation of limit values can be found, e.g., not only in the reduction of noise elsewhere but also in such things as improved social safety. It could be argued that this form of compensation does not always result in a 'per saldo' improvement of the physical environment.⁶⁵

The Crisis and Recovery Act came into effect in times of economic crisis. The aim of this Act is to speed up decision-making and give an impulse to the realisation of spatial and infrastructural projects.⁶⁶ The Act has introduced several new instruments,⁶⁷ but focus will be on the specific experimental tools for development areas. These development areas are designated at the national level⁶⁸ and are either existing urban sites or existing industrial sites. Local authorities can establish a local zoning plan for these areas that should meet specific conditions. This zoning plan aims to optimise the 'environmental space' that can be used for environmentally harmful activities in order to reinforce the sustainable spatial and economic development of the areas in combination with a high environmental quality. Local authorities have the power to deviate temporarily from environmental quality standards and other designated environmental legislation in this area while staying within the boundaries of European legislation. For that, the zoning plan must include a programme of measures, including all necessary compensatory measures. So, in principle, this so-called programmatic approach is not based on exceeding standards. Only a temporarily deviation—10 years—is allowed. The approach intends to ensure timely compliance with environmental quality standards by linking measures to exceedance at the programme level while at the same time there is room for new activities.⁶⁹ The Ministry of Environment and Infrastructure has been delivering yearly progress reports.⁷⁰ These reports show that in the majority of the designated development areas, in the end there is no need to deviate from the environmental standards. Other creative solutions were found to realise the area development. The possibility to deviate from the standards supported this process of finding solutions within the boundaries of the environmental standards. Just like the evaluations of the City and

⁶⁴Art. 2 and 3 City and Environment (Interim) Act.

⁶⁵Boeve (2017), p. 293.

⁶⁶Verschuuren (2013).

⁶⁷De Graaf and Tolsma (2015), pp. 294–296.

⁶⁸They are designated in the 'Decree implementing the Crisis and Recovery Act'.

⁶⁹Another example of this approach is the Dutch approach on air quality, see Fleurke and Koeman (2005) and Boeve and Van den Broek (2012).

⁷⁰These reports 'Voortgangsrapportage Crisis en herstelwet' are available at www. omgevingswetportaal.nl (in Dutch).

Environment Act indicated, the option to deviate from the standard was mostly used for noise issues. The provisions of the Crisis and Recovery Act show some weak elements that have to be addressed, for instance the rather vague criteria that form the basis for the designation of the development areas. Another point of attention would be that the regulation lacks ambition in further improvement of the environmental quality of the area. The approach is primarily aimed at a full use of the allowed maximum level of pollution, which does not necessarily fit with the concept of the compact city. A positive element of the Act is that it provides for extra tools for local authorities to address existing pollution rights. In short, the Act offers a statutory basis to amend pollution rights of existing activities in the development area for spatial planning reasons.⁷¹ However, an important restriction is that the existing pollution rights can only be amended for spatial planning reasons if they haven't been used in the last 3 years, and they are also expected not to be used in the near future. That restriction raises the question if these provisions have really added value in relation to the 'classic' instruments for amending existing pollution rights.

Another way to provide flexibility when applying environmental quality standards is based on the principle of risk acceptance. The idea is to lower the protection for specific buildings, for instance a former company house on a harbor site or in a light industrial area. The justification for exceeding the environmental standards (noise, odour, etc.) for these specific objects is found in the acceptance of the residents. They are aware of the higher noise or odour pollution but still chose to live there. In Dutch Environmental Law, this method is, as yet, used in very specific situations only.⁷² The idea is that in future, under the new Dutch Environmental and Planning Act, this method may be used in more situations (e.g., houses on industrial sites). In the literature, opinions differ as to the broadening of the scope of this method of risk acceptance. Some see it as a good opportunity to solve the problem of sites that are difficult to develop.⁷³ Others raise the point of the difficult implementation of this method when new residents and their legal successors have no specific relation with the polluting activity.⁷⁴ In my opinion, a fundamental concern with this method, and particularly if it is widely implemented, is that no lower limit is given for exceeding the standard.⁷⁵ The consideration of whether there is an acceptable living and social climate in relation to risk acceptance does not appear to be a simple one and is also difficult for an administrative court to review.

⁷¹Art. 2.3 (3) and (4) Crisis and Recovery Act.

⁷²This instrument is implemented in the Dutch Rural Dwelling Act, Stb. 2012, 493 and is only applicable in situations where the zoning plan allows new residents to live in former 'farmhouses'. These new residents are not working at the farm. Background of this legal framework is the prevention of deserted rural houses, *See Parliamentary Papers II* 2011/12, 33 078, no. 3, pp. 1–2.

⁷³Bregman (2014), p. 10; Alders (2012).

⁷⁴Driesprong (2014), p. 51.

⁷⁵Boeve (2017), p. 268.

4.4 The New Dutch Environmental and Planning Act

The discussed legislation in paragraph 4.3 shows that the Dutch government is experimenting with integrated approaches for urban (re-)development. The intention is to implement these integrated approaches in the future Environmental and Planning Act (EPA). This Act will replace the majority of the existing environmental and spatial planning acts, including the City and Environment Act and the Crisis and Recovery Act. The EPA provides for a framework of mainly procedural rules. More substantive provisions will be implemented in four governmental decrees based on the EPA. The main reasons for this fundamental system change is that the current legislation is too fragmented, not transparent enough and not sufficiently equipped for the current and future challenges concerning sustainable development.⁷⁶

One of the key elements of the new framework is to give local authorities more room for situation-specific considerations. The goal is to 'facilitate the social dynamic of a society that takes an interest in the environment.⁷⁷ Initially, the government intended to include the specific provisions on 'development areas' of the Crisis and Recovery Act in the EPA. However, the final version of the EPA shows a different approach. There is no general provision to deviate from environmental standards for complex (re-)developments areas. In line with the findings of the evaluations of the City and Environment Act and the Crisis and Recovery Act, research had shown that such a general provision was only needed for the deviation of standards for noise nuisance and soil pollution.⁷⁸ Instead, the government chose to build the flexibility in the framework for environmental standards itself.⁷⁹ The Explanatory Memorandum emphasises that 'the new system provides administrative bodies with the freedom 'at the front end' of the policy process',⁸⁰ meaning that the framework allows local authorities to set area-specific environmental standards for, e.g., noise focussing on the local situation. In August 2018, the four decrees based on the EPA were published.⁸¹ These decrees show that local authorities have a wide discretion to weigh and balance the various interests when making decisions and applying environmental standards. In that sense, the tools provided by this new framework for local authorities support the idea of the compact city.

Nevertheless, in my opinion, certain safeguards are missing. A concern is that the EPA provides in a wide range of flexibility instruments (not all discussed in this contribution). The Advisory Division of the Council of State pointed out that regulations will be less transparent and predictable if local authorities make use of

⁷⁶Explanatory memorandum EPA, p. 2, English version available on https://www.government.nl/ documents/reports/2017/02/28/environment-and-planning-act----explanatory-memorandum.

⁷⁷Explanatory memorandum EPA, p. 13.

⁷⁸Parliamentary Papers II 2013/14, 33 962, no. 3, p. 267.

⁷⁹De Graaf et al. (2018), p. 313.

⁸⁰Explanatory memorandum EPA, p. 13.

⁸¹The decrees are available at www.omgevingswetportaal.nl (in Dutch).

the variety of flexibility instruments. This may lead to legal uncertainty.⁸² Another concern is that minimum-compliance behaviour,⁸³ to my opinion, is not properly addressed in the new framework. Requirements for regular testing and, if necessary, revision of the area-specific standard that has been established by the local authority are missing.⁸⁴ Such an approach would support the idea of a good (environmental) quality in the compact city.

Finally, there are some remarks on the tools for local authorities to address existing polluting rights. The EPA seems to provide for improved possibilities on this topic. Local authorities on the municipality level are obliged to establish an environmental plan containing decentralised rules for the physical environment. This environmental plan has a broad scope; all local environmental rules must be included in the plan such as rules in the field of spatial planning and local environmental quality standards.⁸⁵ A new element is that a local authority is allowed under certain conditions to include instructions in a zoning plan, which requires an existing activity to take certain measures. We have to wait for case law to know to what extent this tool can be used. The principles of proportionality and legal certainty will set the boundaries for this tool.⁸⁶ However, the case mentioned in par. 4.2 (the requirement to put a roof over an open storage to enable new developments in the surroundings of the establishment) could be a good example of how this tool could be used in future.

5 Concluding Remarks

The concept of the compact city is an important tool to support urban sustainable development. However, the intensified use of the urban areas can also cause tension between environmental law and spatial planning policy. Environmental issues in the compact city cannot be solved by keeping distance between activities that, for environmental reasons, do not go well together. At the European level, integrated approaches for sustainable urban development and the prevention of soil sealing are promoted in policy documents. There is no specific EU legislation on sustainable urban development. At the national level, countries like the Netherlands are struggling to find an effective approach to create space for new urban developments in the existing urban area, while at the same time a good environmental quality in the cities is guaranteed. The Dutch 'ladder of sustainable urbanization' constitutes an impulse for realising the idea of the compact city. The main issues in the Netherlands

⁸²Parliamentary Papers II 2013/14, 33 962, no. 4, pp. 28–29.

⁸³In the sense that the allowed maximum level of pollution is fully used.

⁸⁴Boeve (2017), p. 336.

⁸⁵Art. 2.4 EPA.

⁸⁶Groothuijse et al. (2016).

concern the influence of environmental quality standards on land-use choices and the limited options for environmental law tools to reduce the emission of existing sources of pollution in order to make room for new developments. The discussed tools in Dutch environmental law leave room for a more flexible approach by allowing authorities to deviate from environmental quality standards. However, there are also some weak elements in these (in some cases experimental) approaches, like vague concepts that form the legal basis for the deviation of environmental standards and a lack of ambition to, if possible, further improve the environmental quality of the area within a certain time frame. The new Dutch Environment and Planning Act gives local authorities more tools for situation-specific considerations. In that sense, the idea of the compact city is better supported in this Act, although some points of attention remain.

References

- Alders E (2012) Eindelijk gerechtigheid met het wetsvoorstel plattelandswoningen, Bouwrecht 2012/14
- Boeve MN (2017) Het omgevingsrecht van de compacte stad. Het omgevingsrechtelijk instrumentarium voor verdichting en functiemenging in het stedelijk gebied. Dissertation, University of Amsterdam
- Boeve MN, Van den Broek GM (2012) The programmatic approach; a flexible and complex tool to achieve environmental quality standards. Utrecht Law Rev 8(3):74–85. https://doi.org/10. 18352/ulr.206
- Boeve MN, Van Middelkoop L (2010) Sustainable urban development, the Dutch method best practice for the European integrated approach? J Eur Environ Plann Law 7(1):1–23
- Bregman AG (2014) De mogelijkheden van gebiedsgerichte normstelling. In: Bregman AG et al (eds) Duurzame gebiedsontwikkeling: over vormen van regulering en de rol van aanbesteding, VMR 2013-1, The Hague
- Dantzig GB, Saaty TL (1973) Compact city: a plan for a liveable environment. Freeman, San Francisco
- De Graaf KJ, Tolsma HD (2015) The future Environment and Planning Act and the impact of the Crisis and Recovery Act: country report the Netherlands. IUCN Acad Environ Law eJ 6 (6):293–302
- De Graaf KJ, Platjouw FM, Tolsma HD (2018) The future Dutch Environment and Planning Act in light of the ecosystem approach. Ecosyst Serv 29(Part B):306–315
- De Roo G (2000) Environmental conflicts in compact cities: complexity, decisionmaking, and policy approaches. Environ Plann B Plann Design 2000(27):151–162. https://doi.org/10.1068/ b2614
- Driesprong A (2014) Gebiedsgerichte milieunormen en milieunormering. De casus plattelandswoning: een reactie vanuit de praktijk van Rijkswaterstaat. In: Bregman AG et al (eds) Duurzame gebiedsontwikkeling: over vormen van regulering en de rol van aanbesteding, VMR 2013-1, The Hague, pp 47–51
- European Environmental Agency (EEA 2015a) Urban sustainability issues what is a resourceefficient city? https://www.eea.europa.eu/publications/resource-efficient-cities/file
- European Environmental Agency (EEA 2015b) Urban sustainability issues enabling resourceefficient cities. https://www.eea.europa.eu/publications/enabling-resource-efficient-cities
- Evaluatiecommissie Stad en Milieu (2004) De doeltreffendheid en effecten van de Experimentenwet Stad en Milieu, Slotdocument, The Hague, 2004

- Fertner C, Grosse J (2016) Compact and resource efficient cities? Synergies and trade-offs in European cities. Eur Spatial Res Policy 23(1):65–79
- Fleurke F, Koeman NSJ (2005) The impact of the EU air quality standards on the planning and authorisation of large scale infrastructure projects in the Netherlands. J Eur Environ Plann Law 2 (5):375–382
- Geurts KT, Van Wee B (2006) Ex-post evaluation of thirty years of compact urban development in the Netherlands. Urban Stud 43(1):139–160
- Groothuijse FAG et al (2016) Omgevingsplan: overgangsrecht, gebodsbepalingen en het verschuiven van onderzoeksplichten. TBR 2016(8):715–726
- Lee J, Kurisu K, An K, Hanaki K (2015) Developments of the compact city, index and its application to Japanese cities. Urban Stud 52(6):1054–1070
- Nabielek K et al (2012) Stedelijke verdichting: een ruimtelijke verkenning van binnenstedelijk wonen en werken. PBL, The Hague
- OECD (2012) Compact city policies. A comparative assessment, OECD green growth studies. OECD Publishing, Paris. https://doi.org/10.1787/9789264167865-en
- Otten F (2011) De relatie tussen het gebiedsontwikkelingsplan op basis van de Crisis- en herstelwet en milieunormen. In: De Gier TEA (ed) Goed verdedigbaar, Deventer, pp 441–453
- Raad voor de Leefomgeving en Infrastructuur (2015) Vernieuwing omgevingsrecht: maak de ambities waar. RLI, The Hague
- UNEP (2018) The weight of cities. Resource requirements of future urbanization, via: http://www. resourcepanel.org/reports/weight-cities
- Van Rijn-Bogaart M (2017) Flexible directives: towards a better environment? An analysis of the balance between flexibility for member States and harmonisation regarding the effective protection of European Union's water and air. Dissertation, University of Amsterdam
- Van Velsen SM (2016) Het bestemmingsplan onderzocht. Festival van onderzoeksrapporten ter voorbereiding van bestemmingsplan en wat de Omgevingswet hieraan doet, Milieu en Recht 2016/72
- Verschuuren J (2013) The Dutch Crisis and Recovery Act: economic recovery and legal crisis? Tilburg Law School Legal Studies Research Paper Series No. 04/2011
- VROM-Inspectie (2009) Geluid? We willen het niet horen! Onderzoek verlenen hogere waarden, VROm-Inspectie 2009
- VROM-Raad (2009) Dynamiek in gebiedsgericht milieubeleid. Ontwikkelen door herschikken. Advies 075. VROM-Raad, The Hague