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## Environmental planning



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# Environmental planning

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Environmental planning involves formulating environmental policy requirements such as immission control or nature conservation in strategies or programmes and laying these out in concrete terms in the sectoral environmental plans of the federal states, regions and municipalities in accordance with planning and environmental law, as well as integrating them into spatial planning.

# 1 Definition and categories of environmental planning

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The umbrella term *environmental planning* encompasses how the requirements of ▷ *Environmental policy*, i.e. the protection, management, development and regeneration of the qualities, services and functions of the environment are handled in planning (cf. ARL 1983; Brandt/Raabe/Sander 1984; Weiland/Wohlleber-Feller 2007).

This term, like its root word *environment* is not standardised in German sectoral ▷ *Environmental law*. Based on the regulations for the ▷ *Environmental assessment*, environmental planning covers the following aspects of the environment (protected assets of the environment):

- humans, in particular human health,
- animals, plants and biological diversity,
- land, soil, water, air, climate and landscape,
- cultural heritage and other assets (section 2(1) of the Act on the Assessment of Environmental Impacts [*Gesetz über die Umweltverträglichkeitsprüfung, UVPG*], cf. also section 9 of the Federal Spatial Planning Act [*Raumordnungsgesetz, ROG*]).

In addition to these protected environmental assets, environmental planning is carried out for other important action areas of environmental policy, such as waste management and the circular economy (▷ *Waste management, circular economy*), the promotion of renewable energies (▷ *Renewable energies*) and improving sustainable transportation (public transport, cycling and walking).

Generally environmental planning is thus defined as ‘all of the spatial planning relevant to environmental protection, whereby environmental protection is the primary objective and/or a concomitant objective’ (UBA [German Environment Agency] 1999: 49). There are four categories of environmental planning:

- 1) planning which pursues primarily or almost exclusively sectoral environment objectives with the relevant planning instruments (e.g. ▷ *Air pollution control and noise abatement planning*)
- 2) planning which pursues sectoral environmental objectives to a considerable extent as part of its key tasks, but which also encompasses other aspects that impact the environment (e.g. waste disposal planning)
- 3) planning which integrates the objectives of sectoral environmental planning as well as strategies for environmental protection into a comprehensive spatial strategy (▷ *Spatial planning with integrated environmental planning at the different planning levels*)
- 4) environmentally-focused planning that deals with all environmental issues including their reciprocal effects in an integrated way (integrative environmental planning)

Sectoral environmental planning refers to planning that focuses on one aspect of the environment. Other types of sectoral planning that significantly impact the environment (e.g. transport route planning) do not generally fall under the term *environmental planning*.

## 2 Guidelines, objectives and regulations of environmental policy and environmental law

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Strategies and programmes of environmental policy at federal and state level (e.g. sustainability strategies or climate protection programmes) that can also be classified as strategic environmental planning at government level, as well as sectoral environmental law at the federal and state level (in particular ▷ *Land law*, waste, water, energy and climate protection, immission control and nature conservation law) form the higher-level sectoral and formal framework – together with other policy areas and areas of law (spatial planning, transport, etc.) – for concrete environmental plans which are laid out in spatial terms in the states, regions and municipalities. The influence of the European Union (EU; ▷ *European Union*) on national policy, legislation and planning instruments for environmental protection is growing continually, e.g. for ▷ *Flood protection* as per the Floods Directive (*HWRM-RL*) and Federal Water Act (*Wasserhaushaltsgesetz, WHG*).

Substantively, environmental planning always includes a survey and analysis of the area or aspect of the environment concerned, including existing problems, a▷ *Forecast* of the environmental trend with an analysis of mutual conflicts between current projects in the planning area, a formulation of guiding principles, objectives and proposed measures derived from superordinate regulations and the results of the analyses, as well as a strategy for environmental monitoring (▷ *Monitoring*). Increasingly, environmental planning also includes elements of environmental management, e.g. ▷ *Risk management* in flood risk management plans, and adopts strategies of environmental economics, such as the integration of ▷ *Ecosystem services* (Galler/Albert/von Haaren 2016).

## 3 Sectoral environmental planning

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For most aspects of the environment, e.g. ▷ *Nature conservation* or ▷ *Immission control*, formal sectoral environmental planning (▷ *Spatially-relevant sectoral planning*), such as ▷ *Landscape planning*, air pollution control and noise abatement planning, is carried out on the basis of specific environmental laws. At government level and in more recent action areas of environmental policy, informal, programme-based or strategic environmental planning still dominates, e.g. planning relating to climate protection and adaptation to climate change (*BMUB* [Federal Ministry for the Environment, Nature Conservation, Construction and Nuclear Safety] 2016a, German Federal Government 2008, in the federal states e.g. Senate of the Free and Hanseatic City of Hamburg 2015) (▷ *Climate, climate change*), sustainable mobility/transport development planning (▷ *Mobility; ▷ Transport planning*), or planning for health protection (e.g. heat protection planning, cf. *BMGF* [Austrian Federal Health Ministry for Health and Women] 2017) (▷ *Health in spatial planning (Raumplanung)*). The first binding climate protection plan was published in North Rhine-Westphalia at the end of 2015 (*MKULNV* [Ministry for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection] 2015), and was introduced with the North Rhine-Westphalia Climate Protection Act in January 2013 as a new plan category (▷ *Climate protection*). In Baden-Württemberg the state's Climate Protection Act of July 2013 prescribed the creation of an 'integrated energy and climate protection strategy' for the first time; the draft of a Climate

Protection Act in Lower Saxony in March 2017 stipulates likewise. As a result, environmental planning comprises complex strategies and programmes (e.g. biodiversity strategy), plans related to individual planning areas (e.g. forestry framework plans) or rather small-scale designated conservation areas (e.g. water protection areas). Its legally binding effect varies accordingly.

One exception here is landscape planning as a partly cross-sectional type of planning for issues like ▷ *Biodiversity*, balance of nature (natural assets and their interactions), ▷ *Landscape* and recreation (section 1(1) and section 7(1) no. 2 of the Nature Conservation Act [*Naturschutzgesetz, NatSchG*]). In addition to the core planning bases specific to landscape planning, the latter also covers nature and landscape-related aspects of other types of environmental planning and is effective at different planning levels, mainly by being integrated into spatial planning. Landscape planning thus forms a crucial basis for integrated environmental planning within spatial planning (Heiland 2010; Schmidt 1994). Furthermore, landscape planning also provides an essential basis for implementing the environmental assessment and ▷ *Impact mitigation regulation* in settlement and infrastructure planning (▷ *Settlement/settlement structure*; ▷ *Infrastructure*).

While ▷ *Public participation* and cooperation with stakeholders was somewhat neglected in environmental planning initially (Dickhaut/Saad 1994), there has recently been a shift towards more ▷ *Cooperative planning* in the context of a transparent ▷ *Planning culture* and ▷ *Environmental justice that ensures broad acceptance of its outcomes*.

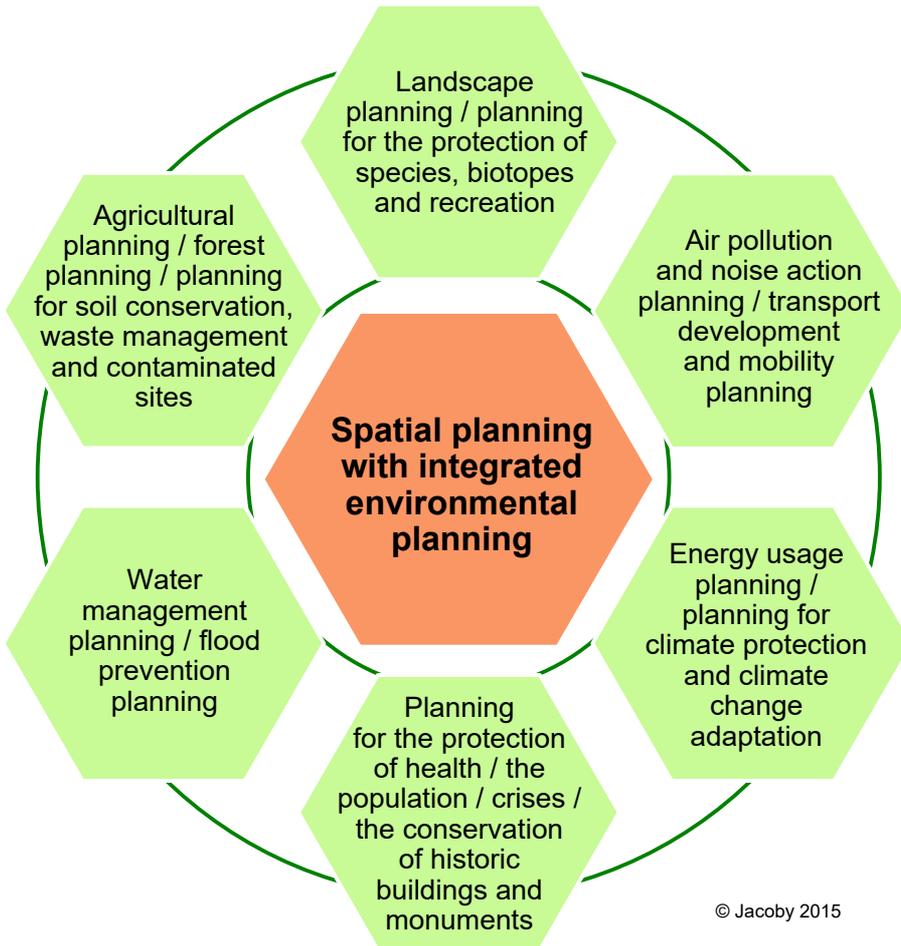
## 4 Spatial planning with integrated environmental planning

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The system of environmental planning includes sectoral environmental planning in the broader sense as well as comprehensive spatial planning. Spatial development plans should contain stipulations on the desired structure of open spaces (▷ *Open space concepts, regional*) as per section 8(5) of the Federal Spatial Planning Act, e.g. largely overlapping open spaces (▷ *Green belt*), uses of ▷ *Open space* such as land to ensure the supply of raw materials (▷ *Security of raw materials supply*), the regeneration and development of spatial functions such as climate compensation functions for settlements, and open spaces for preventive flood protection. “§Spatial planning takes into account environmental planning reports in accordance with the wide-ranging environmental regulations in ▷ *Planning law* as part of its ▷ *Weighing of interests* for planning purposes, and thereby comprehensively integrates environmental requirements in its planning strategies (see Fig. 1). The same applies to the integration of environmental planning in ▷ *Urban land-use planning*. This is set out explicitly for landscape plans and other plans, especially water, waste and immission control law in section 1(6) no. 7g of the Federal Building Code (*Baugesetzbuch, BauGB*).

According to ▷ *Spatial planning law (Raumordnungsrecht)*, spatial development planning is also tasked with coordinating spatially-relevant sectoral planning (section 1(1) of the Federal Spatial Planning Act). Thus, the objectives of spatial planning as per section 4(1) of the Federal Spatial Planning Act and the basic principles and other requirements of spatial planning (▷ *Objectives, principles and other requirements of spatial planning (Raumordnung)*) must be observed in sectoral environmental planning. Corresponding spatial planning clauses can be found in the specialist laws.

Figure 1: The integration of environmental planning in spatial planning



Source: The author

## 5 Integrative environmental planning

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It has hitherto not been possible to implement an integrative environmental planning approach in the federal German planning system (Kühling/Hildmann 2003). The planned introduction of environmental master planning or environmental planning principles with drafts of an environmental code (BMU [*Federal Ministry for the Environment, Nature Conservation and Nuclear Safety*] 1998; Scheidler 2008) failed mainly because of problems around legislative powers and the diverging interests of the federal government and federal states. However this type of environmental planning was also questioned by experts within the > *Spatial sciences*, as the environmental planning issues are already integrated by way of spatial planning with integrated landscape planning, and improving or further developing this existing instrument (cf. Erbguth 1984) might be more effective.

Furthermore, the weighing of environmental issues in the context of integrative environmental planning at an earlier stage would complicate the weighing of interests within the planning process as a whole in view of the overarching guiding principle of sustainable spatial development (> *Guiding principles for spatial development*), as well as significantly restrict the leeway of spatial planners (ARL 2008).

Although the demand for a national environment plan (German Federal Parliament 1998) was not fulfilled in Germany, integrated environmental programmes with non-binding policy objectives and proposed measures have been established at lengthy intervals, initially at the start of the 1970s (German Federal Parliament 1971) and finally in 2016 (*BMUB* 2016b). Some strategic environmental plans such as those in the Netherlands or in Austria (German Federal Parliament 1998: 31 et seq.) and the environmental plan of the state of Baden-Württemberg (*UM B-W* 2007) can likewise only be classified as non-binding programmes at government level. A few examples at regional and municipal level in Germany are similarly non-binding plans, e.g. older municipal environmental plans in cities in North Rhine-Westphalia (City of Dortmund 2002).

## 6 Environmental planning and environmental assessments

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The environmental protection objectives set out in the relevant laws and plans that are significant for the spatial development plan must be taken into account as part of the environmental assessment in the course of (> *Spatial planning*) (Hanusch/Eberle/Jacoby et al. 2007) as per Annex 1 (to section 9(1)) of the Federal Spatial Planning Act. The same applies to the environmental assessment in urban land-use planning, whereby particular reference is made here to the importance of landscape plans (section 2(4) of the Federal Building Code). Environmental planning thus provides essential principles for environmental assessments in spatial planning and other types of sectoral planning through its analyses and its environmental quality objectives and standards, as well as through its specific planning designations (in particular designated conservation areas) (see Fig. 2).



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