

Strategic Environmental Assessment for the National Strategy on Spatial Planning and the Environment of The Netherlands

Summary and effects for neighbouring countries

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Strategic Environmental Assessment for the National Strategy on Spatial Planning and the Environment of The Netherlands Summary and effects for neighbouring countries

This is a summary of the Strategic Environmental Assessment (SEA – PlanMER) for the draft National Strategy on Spatial Planning and the Environment (draft NOVI). The NOVI is a strategic plan that contains policy choices that in outline set the course for a cohesive approach to creating space for climate adaptation and energy transition, for sustainable economic growth potential for the Netherlands, for strong and healthy cities and regions and for the futureproof development of rural areas.

Against a background in which many aspects of the living environment are under pressure, the elaboration and practical implementation of the draft NOVI –and the resultant effects for the state of the physical living environment – remain uncertain. Effects can often be both positive and negative, depending on their elaboration in (area-specific) programmes, the further elaboration into follow-up decisions by national, provincial and municipal government, and the choice of instruments to be deployed.

The policy choices in the draft NOVI represent both opportunities and risks for all aspects of the physical living environment; there are however more opportunities than risks. Given those uncertainties, and with a view to grasping opportunities and overcoming the identified risks, it is essential that we keep a tight rein throughout the elaboration and practical implementation of the policy. A form of governance for a coherent approach and coherent monitoring of the effectiveness of the policy, and of the resultant effects are crucial in the carefully considered further elaboration into follow-up decisions, while maintaining the ability to optimise the grasping of opportunities and the management of risks.

Why an environmental assessment for the draft NOVI?

To aid in determining the vision and reaching decisions about the NOVI, the Strategic Environmental Assessment (plan-m.e.r. - SEA) procedure must be followed. This procedure ensures that environmental interests are fully taken into account in the preparation of plans. In the SEA – the report in which the results of the SEA procedure are recorded – the consequences of policy for the environment are fully clarified. This results in careful consideration of the decision about the draft NOVI. In addition, with regard to the draft NOVI, what is known as an appropriate assessment was carried out. This assessment examined the possible consequences for the preservation targets for the strictly protected Natura 2000 areas. The SEA – which also contains the results of the appropriate assessment – is attached as an appendix to the draft NOVI, as a vision document.

Approach for a broad assessment of 'environmental impact'

The 'Wheel of the living environment' (*Rad van de leefomgeving*) was developed as part of the SEA for the NOVI. As an assessment framework, the 'Wheel' serves as the starting point for a description of the state of the living environment and the impact assessment.

The 'Wheel' follows the broad and integrated approach of the Environment and Planning Act (*Omgevingswet*), which is also expressed in the NOVI. Structured according to the objectives of the Environment and Planning Act, consequences for the physical living environment have been considered from four different perspectives. With a view to protecting the physical living environment, consideration was given to 1) a safe and healthy physical living environment and 2) good-quality living environment. With a view to fulfilling societal needs, consideration was given to 3) the residential environment and 4) the economic environment. Thanks to the broad-based focus on the entire physical living environment, the SEA enjoys a broader scope than the traditional environmental aspects referred to in the Environmental Management Act (*Wet milieubeheer*). Figure 1 shows the Wheel of the Living environment, with at its outer rim the aspects (printed in bold) and a selection of indicators included in the assessment. This selection is a result of an analysis of tasks in the physical living environment and the process of consultation about the intended scope and level of detail of the SEA.

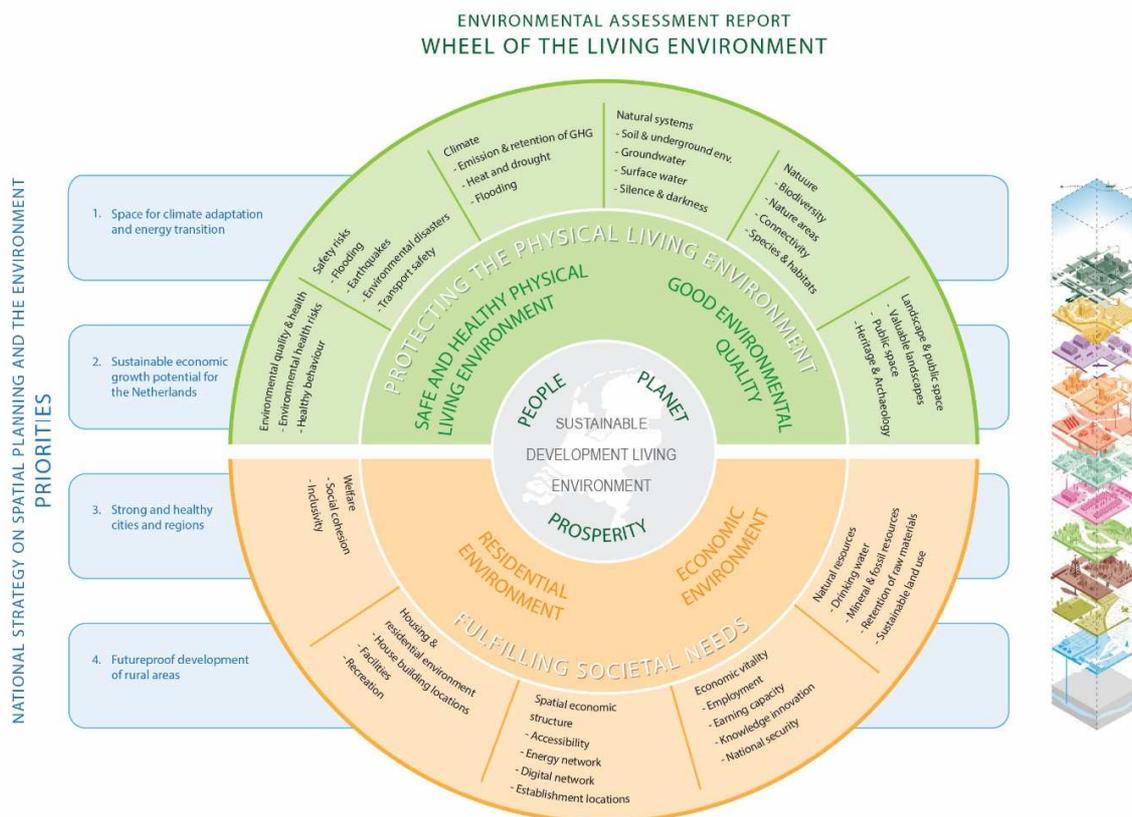


Figure 1 | The Wheel of the Living environment; assessment framework SEA NOVI.

The SEA is aimed at assessing the policy choices for the four policy priorities described in the draft NOVI; these are listed on the left-hand side in figure 0.1. In line with the long-term focus of the draft NOVI, effects are considered in relation to the reference situation in 2030. This relates to the state of the living environment as it

is expected to be in 2030, if existing policies remain unchanged, and taking account of autonomous trends and developments. Although there is already a great deal of uncertainty about autonomous trends and developments in the period through to 2030, the uncertainties about autonomous trends and developments in the long term – through to 2050 – are enormous. Wherever relevant and possible, an extended view is given towards 2050, in the SEA.

To tie in with the strategic character of the draft NOVI, effects can only be pictured in qualitative terms and on the basis of expert judgement. The way in which policy will eventually be implemented has not yet been determined; this will require further elaboration of ambitions and strategic national choices into area-specific programmes and into future decisions by national, provincial and municipal governments. The long-term policy effects for the physical living environment are themselves surrounded with uncertainties. On the other hand, it is already possible to identify opportunities and risks that demand attention in the further elaboration into programmes and follow-up decisions. That then represents a stepping stone for these programmes and follow-up decisions and a basis for monitoring and evaluation; an essential precondition for ‘keeping a tight rein’, during the further elaboration and implementation of the policy.

Reflection and consideration of alternatives during the preparation of the NOVI

Right from the initial preparation stages for the NOVI, a start was made in 2015 on work to prepare the SEA procedure. This meant that on the basis of reflection, added value could be provided throughout the process by giving the ‘environmental interest’ (in this case, according to the broad view of the physical living environment) a full place in the plan preparations. With that in mind, at various moments during the preparation of the NOVI, reflection was offered from the perspective of the SEA. Below is a summary of how this took place in the process.

Reflection 1 Jan - Feb. 2016 Broad-based approach	Contribution to placing subjects on the agenda that demand attention in the NOVI, by introducing the Wheel of the Living environment for a broad-based approach to quality of the living environment. Biodiversity and welfare were for example explicitly introduced as specific points for attention.
Reflection 2 June - Nov 2017 Alternative policy options	Contribution to an explicit assessment of opportunities and risks in examining the policy options by in-depth study groups. This was the moment at which the consequences of policy alternatives were broadly examined. The SEA contains an assessment of the alternative policy options that were examined. The most important insights into opportunities and risks are summarised in the background document ‘Assessment of policy options for the NOVI’.
Reflection 3 May 2018 Policy choices	Contribution to focusing the line of reasoning and policy choices in the NOVI and placing themes on the agenda which (on the basis of the initial assessment of opportunities and risks) require attention in elaborating the draft NOVI.
Reflection 4 Nov 2018 Conflicting claims	Contribution to the focusing of the core messages in the NOVI and mapping out the points of conflict between the four priorities and the policy choices and conflicting claims in specific areas.
Reflection 5 Jan - May 2019 Optimisation	Contributing to determining explicit choices with regard to conflicting claims and identifying subjects that demand explicit attention in the SEA. This reflection explicitly focused attention on the risks for environmental quality, health, biodiversity and welfare, among the people who prepared the draft NOVI, whereby various possibilities were discussed for optimising policy choices. This in turn contributed to the further focus on these subjects in the draft NOVI.

Alternative policy options

A vital element of the process of reflection during the preparation of the NOVI involved the examination of alternative policy options at an early planning stage, at a point when this delivered added value to the process. During the in-depth study phase, for the four strategic policy tasks, each of the tasks was considered in greater depth and policy options examined, in consultation with a wide range of experts from the relevant departments, provincial and municipal authorities and from various government institutes. External specialists and societal partners were also consulted at various moments.

The risks and opportunities for the alternative policy options were examined, in outline. As part of the SEA process, the ‘Wheel of the Living environment’ was introduced, to guarantee a broad assessment of possible advantages and disadvantages for the physical living environment. This insight into alternative policy options – with their accompanying risks and opportunities – laid the foundation stones for elaboration of the draft NOVI; the Cabinet perspective published in 2018 set the tone. In this way, the assessment of alternatives was made an integral part of the SEA process, at the point in time at which it generated the greatest added value to the process.

Below is an overview of the alternative policy options examined and in respect of which the most important risks and opportunities were elaborated. In the background document ‘Assessment of policy options for the NOVI’, these are explained in greater detail.

Overview of alternative policy options examined for the four policy priorities

<p>Policy options space for climate adaptation and energy transition</p> <ol style="list-style-type: none"> 1. Low temperature heat 2. High temperature heat 3. Power and light 4. Mobility 5. Food and nature 6. Climate adaptation 7. Use of nationally owned land and government real estate as a flywheel 8. Climate nurseries and acceleration chambers 	<p>Policy options for sustainable economic growth potential for the Netherlands</p> <ol style="list-style-type: none"> 1. Strengthening of the international network position 2. Development of sustainable and competitive urban-economic networks 3. Sustainability in regions and cities with excellent living, working and residential climate
<p>Policy options for strong and healthy cities and regions</p> <ol style="list-style-type: none"> 1. Accommodating growth in the urban core areas and the urban networks. 2. Vitality in shrinkage areas. 3. Inclusive society 4. Transition to a sustainable built environment and sustainable mobility. 	<p>Policy options for futureproof development of rural areas</p> <ol style="list-style-type: none"> 1. Nature: optimisation versus transformation 2. Agriculture: optimisation versus transformation 3. Landscape: optimisation versus transformation 4. Peat pastureland: optimisation versus transformation

The state of the physical living environment

The current state of the physical living environment reveals an uncertain picture. Above all in respect of spatial economic structure, economic vitality, the quality of public space and security risks, the current state of the physical living environment can generally be described as good. There is above all pressure on the current state with regard to climate, natural systems, nature, environmental quality & health; at this point, the ambitions have not been satisfied, and there are bottlenecks at a many points.

Although there is real uncertainty about geopolitical and technological developments, among others, autonomous trends and developments mean that the state of the living environment will come under even greater pressure with regard to most aspects, between now and 2030. Existing policy is not expected to reverse the negative trends. The exception relates to the positive trends with regard to the state of natural systems. This itself relates to the positive contribution of the Water Framework Directive for the quality of groundwater and surface water.

Between now and 2030, greater pressure will above all be applied in general in respect of the climate, nature (in particular biodiversity), environmental quality & health. There are also notable negative trends with regard to landscape and public space, natural resources, the spatial economic structure and welfare; above all the growing pressure on social cohesion and inclusivity mean that welfare represents a vulnerable aspect in the reference situation.

Figure 2 is a summary of the state of the physical living environment, both for the current situation (pale line) and for the reference situation in 2030 (dark dotted line). It is important to record that this is merely an outline picture of the state of the physical living environment. The state of specific indicators that form part of those aspects varies. There are also regional differences, differences within cities and in rural areas, and for example differences inside and outside protected nature areas.

These differences are discussed in further detail in the SEA.

ENVIRONMENTAL ASSESSMENT REPORT WHEEL OF THE LIVING ENVIRONMENT

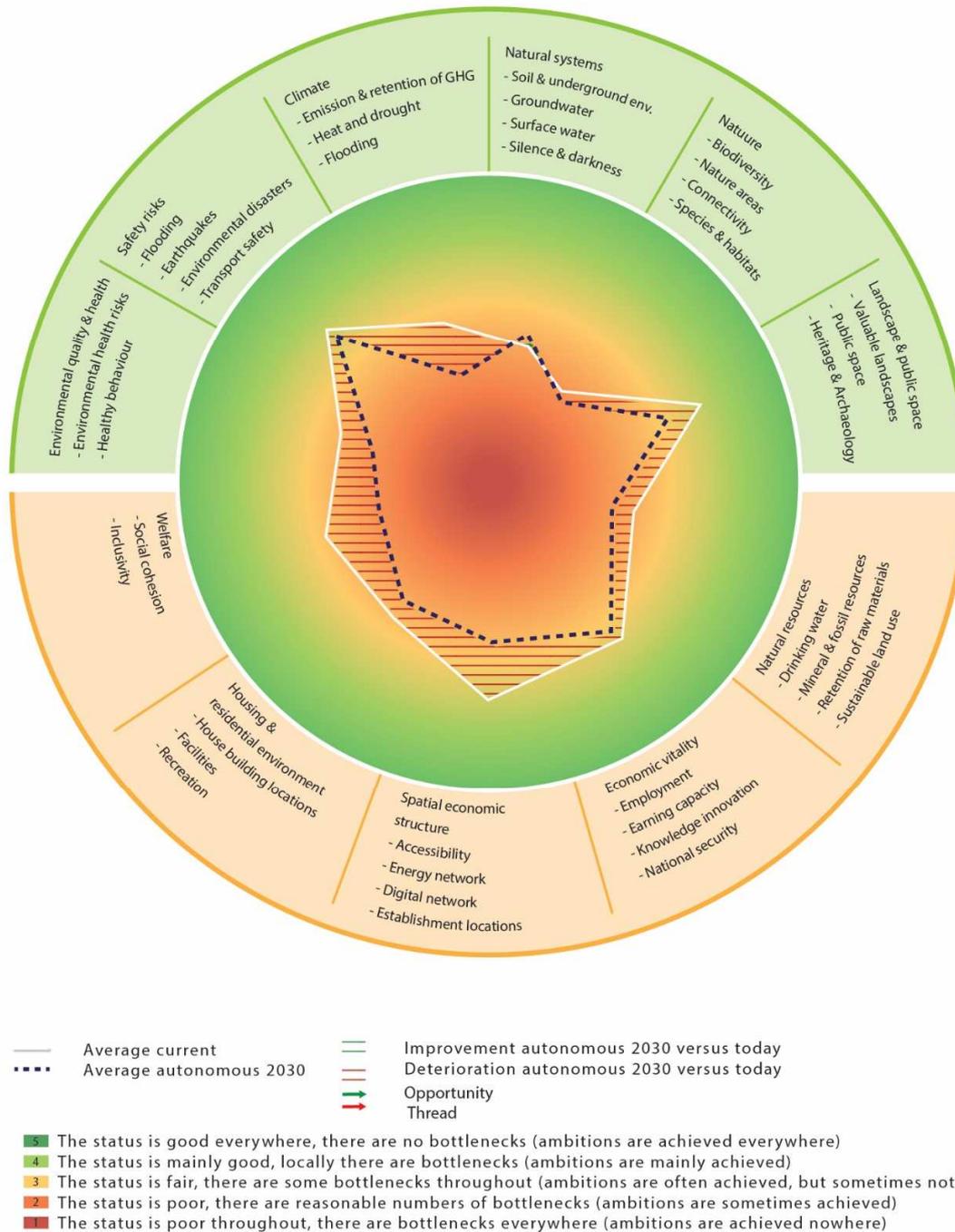


Figure 2 | The state of the physical living environment.

Hereafter the most noticeable developments in respect of the state of the physical living environment are summarised. They are further elaborated in the SEA.

NOTICEABLE DEVELOPMENTS IN THE STATE OF THE PHYSICAL LIVING ENVIRONMENT

The state of nature: Although there is an improvement of the area of land allocated to nature and the conditions for the species of flora and fauna occurring in these areas, within nature areas (including Natura 2000 areas), existing policy seems unable to reverse the negative trend in biodiversity for the Netherlands, as a whole. Around one third of Dutch flora and fauna species are currently threatened, and these numbers are expected to rise between now and 2030. Economies of scale in agriculture and pressure from urbanisation and mobility mean that the negative trend in conditions for protected species and habitats and biodiversity will continue. Moreover, in certain areas, soil subsidence is causing further deterioration of soil structure and soil life. Climate change will create more bottlenecks in the long term, also with regard to the connectivity of nature areas and the robustness of ecological connections.

The state of environmental quality & health: Efforts to improve environmental quality in the Netherlands have been reasonably successful, in the past. Standards relevant to public health – such as clean drinking water, clean soils, clean air and the prevention of noise and other nuisance – have in many cases been satisfied. However, this does not mean that there is no further task from the perspective of public health. Environmental factors are increasingly causing considerable damage to health; air pollution and unhealthy behaviour are contributors. Above all in the cities, increased activity levels are resulting in a further decline in environmental quality and health. In combination with the limited space available in cities to encourage healthy behaviour and the fact that the necessity for a healthy lifestyle is insufficiently widely recognised mean that the state of environmental quality and health is a point that deserves attention.

The state of the climate: Despite the efforts aimed at restricting the emission of greenhouse gases and the possibilities for improving the storage and retention of greenhouse gases, if current policy is continued, the climate ambitions will not be achieved; namely restricting emissions by 49% in 2030. We are investing heavily in the longer term in order to manage the negative consequences of climate change (climate adaptation, drought, heat stress and flooding). Above all for the long term (towards 2050), current policy is expected to be insufficient to tackle the major challenges facing the Netherlands.

The state of natural resources: Population growth, increased prosperity and advances in technological developments are leading to growing demand for the resources and services provided to us by nature. Reserves are becoming increasingly exhausted. Take for example the declining availability of fossil fuels, minerals and other raw materials. There is a clear negative trend and its effects are expected to become increasingly urgent in the longer term (certainly towards 2050). As concerns the utilisation of fertile soil for agriculture, the negative consequences of economies of scale and intensification of agriculture are already becoming increasingly obvious.

The state of the spatial economic structure: Pressure on activity levels in cities is high; tasks in the field of housing construction mean that good locations for business activities are being transformed into locations for housing. The number of movements is growing, and accessibility (above all in and around our cities) is under increasing pressure, while accessibility is in fact one of the key strengths of our spatial economic structure. Between now and 2030, we will therefore be investing heavily in accessibility (MIRT), with a clear focus on hinterland connections and the metropolitan regions (Amsterdam, Rotterdam – The Hague, Utrecht and Eindhoven). Nonetheless, pressure on mobility systems will grow, above all in and around the expanding cities. Those cities are also generating growing demand for greater investment in public transport. For international accessibility, too, there are concerns. Is the Netherlands able to maintain its strong position as a consequence of a combination of limited space for development for air transport and limited investments in international rail links? There are also concerns about the robustness of the energy network and the digital network and current policy neglects the smart combination of supply and demand, almost entirely, despite the fact that these are key indicators for a good spatial-economic structure.

The state of welfare: Given the growing pressure on our cities, and the ever greater discrepancy between the urban and rural environment – there are concerns about the development of spatial social cohesion in the Netherlands, more specifically also within cities. At the same time, technological developments, for example in mobility and in the energy transition, are creating worries about the extent to which everyone in society shares equal opportunities to participate. Existing policy appears unable to address these issues sufficiently.

Opportunities and risks of policy choices

A large number of different tasks come together, influence one another and compete with one another for (environmental) space within the physical living environment. For points of national importance – many of which are sectoral in nature – choices have been laid down in various structural visions and other policy documents. Many of those require no substantial alteration; prolonging existing policy will not result in other effects than those already predicted, and is therefore not considered within this SEA. On the other hand, a cohesive, integrated approach on a national scale and across the boundaries of individual sectors is required for four priorities.

With regard to those four priorities, the draft NOVI offers the following strategic national policy choices:

Priority 1 | Space for the climate adaptation and energy transition

Policy choice 1.1: In 2050, the Netherlands is climate resilient and water robust

Policy choice 1.2: The North Sea offers opportunities for the integration of renewable energy

Policy choice 1.3: Energy infrastructure for renewable energy

Policy choice 1.4: Fulfilling the task of renewable onshore energy

Priority 2 | Sustainable economic growth potential for the Netherlands

Policy choice 2.1: Sustainable and circular economy

Policy choice 2.2: Sustainable sources of energy and changes to production processes

Policy choice 2.3: Optimum national and international accessibility

Policy choice 2.4: Investment in an attractive, healthy and safe living environment

Policy choice 2.5: Encouraging cross-border connections

Policy choice 2.6: Space for datacenters

Policy choice 2.7: Matching supply and demand for offices, business parks and shops

Policy choice 2.8: Spread of tourism

Priority 3 | Strong and healthy cities and regions

Policy choice 3.1: Sustainable development of cities

Policy choice 3.2: Integrated urban development strategy

Policy choice 3.3: Match between housing demand and supply

Policy choice 3.4: Concentrated urban development

Policy choice 3.5: Good-quality cities and regions

Policy choice 3.6: Accessible cities and regions

Policy choice 3.7: Greater vitality and quality of life in areas facing falling population numbers

Priority 4 | Futureproof development of rural areas

Policy choice 4.1: Improved balance between land use and environment qualities

Policy choice 4.2: Biodiversity and natural capital

Policy choice 4.3: Sustainable and vital agriculture and food system

Policy choice 4.4: Strengthening and protecting landscape qualities

The impact of the draft NOVI – and the certainty with which its effects can actually be expected – depends on the degree to which the policy choices are made real, the framework within which follow-up decisions are taken (who is responsible) and the instruments deployed for the further elaboration and practical implementation of the policy (the method of control). It is plain that the draft NOVI contains no actual decisions which at this stage will result in the implementation of measures. This means moreover that a decision on the draft NOVI will not yet immediately result in actual effects, and that the consequences for the state of the physical living environment in the longer term remain surrounded by uncertainty. Moreover, effects can have positive and negative consequences, depending on the further elaboration in (area-specific) programmes, the follow-up decisions by national, provincial or municipal government, and the deployment of policy instruments.

In respect of the four policy priorities, the draft NOVI provides policy choices which set the course for the further elaboration of policy by national, provincial and municipal governments in programmes and follow-up decisions. Here, too, both opportunities and risks emerge that must be taken into account in those follow-up decisions. Whether such risks and opportunities will actually emerge depends on the further elaboration and practical implementation of the NOVI. Given the complexity of the tasks, the time required for the follow-up process and the related uncertainties about the precise elaboration of policy – for example with tailor-made, area-specific solutions – it seems likely that many of these risks and opportunities will only become actually manifest in the longer term (beyond 2030).

Figure 3 represents a summary of the risks and opportunities for the state of the physical living environment, resulting from the policy choices. It presents an overall picture of all risks and opportunities for the four policy priorities.

Taking the (autonomous) reference situation in 2030 as a starting point, the green arrows represent opportunities for improving the state of the physical living environment while the red arrows represent the risk of a decline in the state of the physical living environment. The thickness of the arrows is determined by the number of policy choices in the draft NOVI, which result in opportunities and/or risks for the specific aspects from the Wheel; the thicker the arrow, the greater the number of risks or opportunities. In other words, the thickness of the arrow does not reflect the nature or scope of the risks and opportunities, or the likelihood of their occurrence; the complexity and as a result the related uncertainty about further elaboration and practical implementation of the policy are too great, to make that possible.

It should however be pointed out that this is an overall picture of the risks and opportunities. With regard to individual aspects, both risks and opportunities can arise, in part based on the discrepancy in the specific indicators that make up those aspects. There are also regional differences, differences within cities and in rural areas, and for example differences inside and outside protected areas of nature. These differences are discussed further, in the following paragraphs.

General overview of opportunities and risks of the draft NOVI

On the basis of Figure 3, it is possible to conclude that the draft NOVI offers opportunities for all aspects of the physical living environment; there are more opportunities than risks. By focusing the policy choices on the four policy priorities, major tasks that relate to the state of the physical living environment in the draft NOVI are explicitly addressed, including climate, natural resources and the spatial economic structure.

A number of non-spatial aspects receive less specific attention in the policy choices in the draft NOVI, such as environmental quality & protection of health and welfare. Because the development of the state of these aspects of the physical living environment is already under pressure, without additional supplementary policy and measures, the negative trends in the state of the physical living environment with regard to these aspects

is not expected to be reversed. Moreover, the higher number of risks for nature and landscape & public space will demand specific attention, in the future.

Whether these risks and opportunities will actually occur depends on the further elaboration of policy in (area-specific) programmes, in follow-up decisions by national, provincial and municipal government and the deployment of policy instruments. Partly as a consequence, it seems likely that many of these risks and opportunities will only actually become manifest in the longer term, often beyond 2030.

ENVIRONMENTAL ASSESSMENT REPORT WHEEL OF THE LIVING ENVIRONMENT

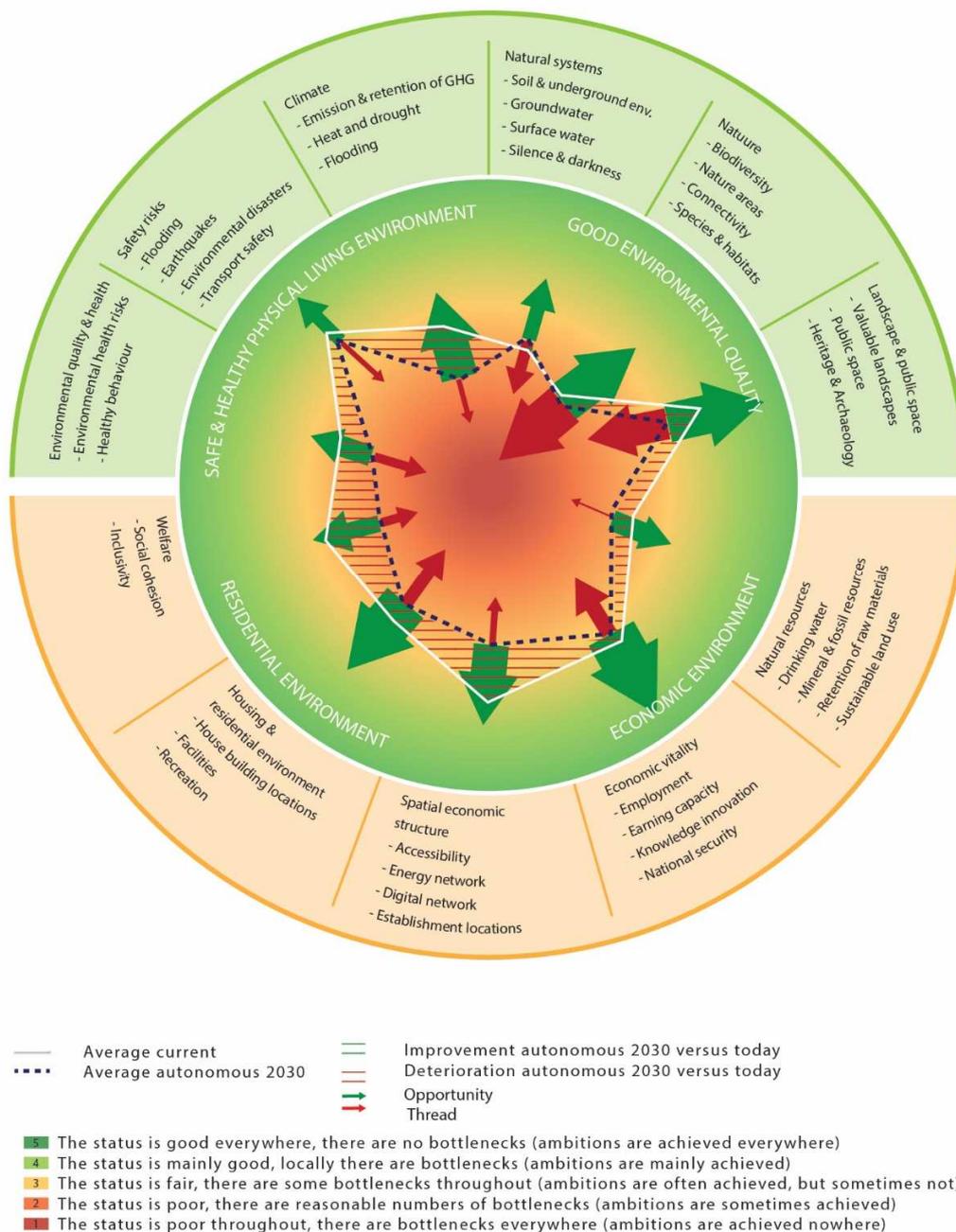


Figure 3 | Risks and opportunities of the policy choices for the state of the physical living environment.

Hereafter a summary is provided of the most notable risks and opportunities for each policy priority. The SEA provides a further assessment of the risks and opportunities.

Opportunities and risks | Space for climate adaptation and energy transition

This priority focuses on a climate-resilient and water-robust structure for the Netherlands, and a positive and cost-efficient energy transition for the living environment.

The policy choices offer opportunities for the state of the climate (which is subject to a negative autonomous trend). This is due to the positive effect of energy transition of the reduced emission of greenhouse gases and the focus on a climate-resilient and water-robust environment. This latter point generates opportunities for reducing heat, drought and the risk of flooding. As a consequence of clustering renewable energy in energy landscapes and more offshore wind, natural landscape and cultural historical values can be preserved, elsewhere. On the other hand, there are risks for environmental quality in that the space needed for the energy transition will result in greater pressure on natural systems, nature and landscape. Interventions in the soil as a result of the construction of an energy infrastructure (heat networks and geothermal energy systems) also represent risks for the natural systems.

Moreover, the energy transition and climate adaptation offer both risks and opportunities for the state of economic vitality. Whether the outcome is positive or negative will depend on the way in which policy is further elaborated and practically implemented. For example, the energy transition will offer new jobs and new developments in the energy sector (at the same time, sufficient capacity on the labour market is an essential precondition for achieving the ambitions of the energy transition). On the other hand, offshore wind energy can also result in risks for the earning capacity and employment opportunities of the fishery sector. By focusing on energy transition, the Netherlands will be less dependent on fossil fuels from abroad; this in turn will be of benefit for national security. At the same time, due to the dependence on wind and solar energy and a limited number of vulnerable landfall locations for offshore wind energy, the security of the Dutch energy network will be more vulnerable. Finally, a climate-resilient environment offers opportunities for the quality of the residential environment (for example more sustainable and more climate-robust homes and facilities) and spatial structure (for example by improving the energy network and the quality of establishment locations).

Opportunities and risks | Sustainable economic growth potential for the Netherlands

This policy priority focuses on a circular and low-CO₂ economy by 2050, that separates economic growth from burdens on the environment. This in turn will create the conditions that could accommodate sustainable economic growth, in the longer term. Cities and urban regions fulfil an increasingly important role as the driving forces behind this economic growth. As a consequence, an attractive living environment and good-quality national and international physical and digital accessibility are vital conditions for establishment locations.

The ambition in respect of this policy priority offers the potential to reverse negative trends in the state of the physical living environment, but precisely what relevance this will have for economic vitality, the spatial economic network, the residential environment and the climate is as yet uncertain. A great deal will depend on the way in which the policy is put into actual practice, a question which can create both risks and opportunities, depending on the precise level of ambition and the nature of the follow-up decisions to be taken. The risks that do emerge relate above all to nature, landscape, the residential environment and environmental health. This applies in particular to follow-up decisions about location-specific developments, such as environmental space for industry, seaports, datacenters and hub locations for bringing about the transition to a circular economy. As concerns the consequences for economic vitality, a great deal will depend on the way in which policy is

elaborated and implemented. The policy choices are concentrated for the time being, on the major port and industrial clusters. This focus represents a risk for economic vitality, since the potential for earning capacity and employment opportunities depends in particular on the extent to which the strengths of cities and urban regions are utilised. At the same time, the transition to a sustainable and circular economy offers opportunities for earning capacity and employment in sectors with close ties to the transition, and that in turn offers opportunities for a boost for knowledge and innovation. One essential precondition is that the labour market offers sufficient capacity for realising this ambition; however, this is in fact expected to represent a risk, in the future.

Opportunities and risks | Strong and healthy cities and regions

This policy priority is aimed at strong, liveable and climate-resilient cities and regions. A system leap will be needed to improve both the economic competitive capacity and at the same time the attractiveness, sustainability and accessibility of urban regions. For the future, it is essential that the urban development tasks in relation to housing, working, mobility, climate and energy be viewed cohesively.

Generally speaking, it can be argued that this policy priority offers opportunities for environmental quality and health, climate, nature, public space and housing in the residential environment. In that sense, the draft NOVI offers the potential to reverse negative trends in the state of the living environment e.g. reduced heat stress, and lower emissions of greenhouse gases and flood risk. Whether this will actually happen depends on the future elaboration of the policy in programmes and follow-up decisions. To a considerable extent, the opportunities relate to the water-robust and climate-resilient structure of the built environment, and the linking together of transport modalities. If the transformation to a healthy, green and attractive living environment is actually achieved, then the quality of public space and residential environments will improve. Facilities will become more accessible.

There are however risks in respect of the choice in favour of compact urban development and choices on mobility. While compact urban development offers opportunities for the living environment in rural areas, and for urban peripheries, compact urban development (with the functional integration of the functions housing and employment) also engenders risks. In compact or 'increasingly dense' cities, more residents, visitors and economic activities are brought together in areas where the environmental quality is already relatively poor. The growth in the number of economic activities, residents and visitors can also result in a further worsening of environmental quality (air, noise, odour and environmental safety). Furthermore, alterations to the mobility system generate risks for nature (for example less interconnectivity) and greater pressure on public space.

Opportunities and risks | Futureproof development of rural areas

This policy priority focuses on the futureproof development of rural areas. As a result of climate change and biodiversity decline, users of rural areas are being called upon to adapt accordingly. It is essential that a balance be found between land use and environmental values (soil, water and air), while ensuring that developments do not take place at the expense of landscape qualities, and that the focus is placed on sustainable and vital agriculture and food systems.

The opportunities and positive effects of the proposed policy relate in particular to climate, natural systems, nature, landscape and public space, natural resources, economic vitality and the residential and living environment. Achieving a better match between the functions in rural areas with the characteristics of soil and water, adapting land use to the availability of freshwater and reducing environmental burdens from agriculture are major contributory factors. In this sense, the policy choices offer the potential to reverse negative trends in nature, climate and landscape. Maximising the focus on tackling soil subsidence and CO₂ emissions in peat pastureland will generate opportunities for climate and natural systems (reduced CO₂ emission, flood risk and

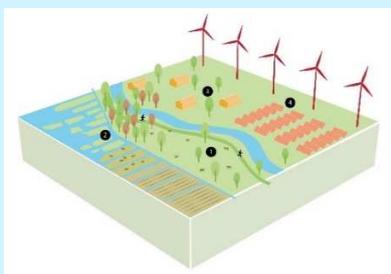
soil subsidence, improved water quality). At the same time, raising water levels could engender risks to the economic vitality of peat pasturelands. The transformation to circular agriculture offers opportunities for climate (dealing with drought and flood risk), the landscape, nature and natural resources.

Coinciding effects in specific areas

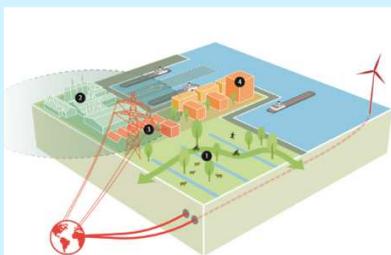
In a number of areas, policy choices coincide. This can result in cohesive effects or alternatively conflicting claims. In the same way, policy choices can conflict with other developments and/or existing use. This relates in particular to urban areas, rural areas, port and industrial areas and the North Sea. The pressure on these areas is already considerable. In elaborating area-specific programmes and in follow-up decisions, it is essential that the interests and risks and opportunities be considered in combination. The coinciding choices in these four area types are outlined briefly, below.



Urban regions: The choice in favour of compact urbanisation in existing built-up areas requires an integrated consideration of the places in which residential and working locations should be developed, and the creation of space in cities for infrastructure. Activity levels in the cities, the demand for space and mobility are all rising. This in turn generates huge pressure on the living environment, public space and wellbeing in the city. We are investing in accessibility where the urban dynamic is greatest, as a result of which the spatial and environmental pressure from mobility in cities will certainly not be reduced. Moreover, the space available for climate adaptation, water, urban green and a healthy living environment and for the energy transition will themselves come under pressure.



Rural areas: The transformation to circular agriculture while maintaining current production levels requires more space, despite the fact that as a result of the parameters for other use functions, (environmental) space for agriculture is under growing pressure. Urban development, the integration of renewable energy (energy landscapes) and the strengthening of valuable landscapes and nature are just a few examples. Specifically in peat pasturelands, a transformation of land use is essential, because water levels in these landscapes must be raised in order to restrict soil subsidence and CO₂ emission. This too will result in spatial conflicts with the use functions established in these locations, including agriculture.



Port and industrial areas: The provision of space for the growth of seaports is contradictory to the desire for smart localisation of energy-demanding industry close to landfalls for renewable, offshore wind energy; the areas in fact often coincide. Space is needed at these locations to facilitate the energy transition and the transition to a circular economy. For the growth of cities (in particular Amsterdam and Rotterdam), demands are also placed on port and industrial areas. Moreover, the growing pressure on these areas goes hand in hand with increased pressure on the living environment, nature, landscape and recreation in and around these areas. An integrated consideration of interests and developments is necessary.



North Sea: The choice to create more space for offshore energy for achieving energy and climate ambitions is in conflict with the use of space for other functions at sea such as fishery, nature, and defence training areas. Coastal defences now and for the long term also continue to demand sufficient opportunities for sand dredging at sea. Offering space for offshore wind could also have consequences for the inclusion or exclusion of land suppletion at sea in the longer term, for example for a possible offshore airport or for seaward coastal defences. This all calls for an integrated consideration of interests and developments in the framework of the North Sea Programme.

Overview of effects for neighbouring countries

Cross-border effects will mainly occur as a result of developments that are expected to bring about an increase or reduction in polluting substances in the air (CO₂, NO_x, PM_x, etc.) or as a result of spatial interventions in border areas (for example wind turbines). If it becomes clear in follow-up decisions exactly how the policy is to be implemented, additional attention will have to be focused on potential cross-border effects.

Below the policy choices and the risks and opportunities are listed, which could have consequences in the territory of Flanders, Germany or the United Kingdom.

Cross-border effects of policy choices on climate adaptation and energy transition

Policy choice 1.1: The Netherlands is climate resilient and water robust in 2050

Flooding - opportunity: A climate resilient structure for the Netherlands, which takes account of a sustainably functioning river system, could have a positive effect on water safety upstream from the Netherlands (reduced water levels in rivers during peak discharge periods).

Policy choice 1.2: The North Sea offers opportunities for the integration of renewable energy

Emission of greenhouse gases - opportunity: The focus on renewable offshore energy can contribute to a fall in CO₂ concentrations and as such to the global approach to climate change.

Biodiversity and spatially cohesive nature areas - risk: If wind turbines are installed at locations of important bird flight routes, there is a risk of significant effects (external effect). Offshore wind turbines are often on internationally important migration routes for birds.

Valuable landscapes - risk: Wind turbines are visible from long distances. If wind turbines are installed in the sea, at the periphery of the Netherlands, there is a risk of the disruption of landscape values abroad (reduced openness, etc.).

Quiet and darkness - risk: Wind turbines are visible from long distances and are illuminated. If wind turbines are installed at the periphery of the Netherlands, there is risk of restriction of dark areas.

Policy choice 1.4: Fulfilling the renewable energy task on shore

Emission of greenhouse gases - opportunity: The focus on renewable energy (wind turbines, CO₂ storage, etc.) on shore can contribute to a reduction in CO₂ concentrations and as such to the global approach to climate change.

Biodiversity and spatially cohesive nature areas - risk: If wind turbines are installed at locations of important flight routes for birds, there is a risk of significant effects (external effect).

Valuable landscapes - risk: Wind turbines are visible from a long distance. If wind turbines are installed at the periphery of the Netherlands, there is a risk of disruption to landscape values abroad (reduction of open landscapes, etc.).

Quiet and darkness - risk: Wind turbines are visible from a long distance and illuminated. If wind turbines are installed at the periphery of the Netherlands, there is a risk of restriction of dark areas.

Cross-border effects of policy choices on sustainable economic growth potential

Policy choice 2.1: Sustainable and circular economy

Emission and storage of greenhouse gases – opportunity: The focus on a sustainable and circular economy can contribute to a reduction in CO₂ concentrations and as a result to the global approach to climate change.

Environmental health risk – risk: A sustainable circular economy does create risks to environmental health (reduction in air quality, noise nuisance, safety risks). These effects can extend over the national boundaries.

Policy choice 2.2: Sustainable energy sources and changes to production processes

Emission of greenhouse gases – opportunity: The focus on sustainable energy sources can contribute to a reduction of CO₂ concentrations and as a result to the global approach to climate change.

Environmental health risk – risk: Space for renewable energy in seaports and industrial areas involves risks to environmental health (reduced air quality). These effects can extend across national boundaries.

Biodiversity - risk: If environmental pressure in border areas increases, for example as a result of energy-intensive industry and traffic, this can involve risks for nature areas and biodiversity in neighbouring countries, for example the Natura 2000 areas.

Policy choice 2.3: Optimum national and international accessibility

Accessibility - opportunity: By focusing on optimum national and international accessibility, there is a clear possibility that the number of jobs that are accessible within one hour will grow. This also applies across national boundaries.

Environmental health risk - risk: Improving accessibility does include risks for environmental health (reduced air quality and increased noise nuisance due to more traffic movements).

Policy choice 2.5: Promoting cross-border connections

Environmental health risk - opportunity and risk: Encouraging rail transport is negative for environmental health. Rail transport produces considerable noise nuisance (also abroad). A possible reduction in air traffic, on the other hand, could contribute to a reduction in CO₂ concentrations in the air, abroad.

Emission and storage of greenhouse gases - opportunity and risk: Encouraging cross-border links can contribute to a reduction in CO₂ concentrations, by cutting air traffic, and as a consequence can contribute to the global approach to climate change. On the other hand, there are also risks of increased CO₂ concentrations (more road and rail transport, etc.).

Employment opportunities, housing locations and facilities – opportunity: The focus by national government on improving cross-border links offers opportunities for Flanders, North Rhine-Westphalia and Lower Saxony. Despite cultural differences, there are already clear relationships in healthcare, housing, employment and education.

Accessibility - opportunity: By focusing on encouraging cross-border links, there is a greater likelihood that the number of jobs that can be reached within one hour will grow. This also applies across national boundaries.

Policy choice 2.6: Space for datacenters

Emission and storage of greenhouse gases – opportunity: The establishment of datacenters where the delivery of residual heat to heat networks is possible and renewable energy is available offers opportunities for efficient, sustainable use of energy (and hence lower emissions of greenhouse gases).

Environmental health risk –risk: space for datacenters includes risks for environmental health (reduced air quality). These effects can extend across national boundaries.

Cross-border effects of policy choices on strong and healthy cities and regions

Policy choice 3.6: Accessibility of cities and regions

Environmental health risk – opportunity: The focus on changed mobility behaviour and an improved urban public transport system will contribute to a reduction in air pollution and noise nuisance. This effect can have a positive influence abroad.

Emission and storage of greenhouse gases - opportunity: The focus on changed mobility behaviour and an improved urban public transport system will contribute to reduced emissions of greenhouse gases. This effect can have a positive influence abroad.

Policy choice 3.7: In areas facing falling population numbers, stronger vitality and quality of life

Employment opportunities – opportunity: Developing and strengthening the regional economic future perspectives in areas facing falling population numbers offers opportunities for employment abroad. Cross-border cooperation and links with neighbouring countries can also improve the socioeconomic situation abroad.

Cross-border effects of policy choices on the development of rural areas

Policy choice 4.1: Improved balance between land use and environmental qualities

Emission and storage of greenhouse gases - opportunity: The emission of greenhouse gases can be reduced by tackling soil subsidence (with oxidation) in peat pasturelands. This will contribute to the global approach to climate change.

Policy choice 4.3: Sustainable and vital agriculture and food system

Environmental health risk – opportunity and risk: There are opportunities for health risks as a consequence of the transformation to circular agriculture. Residual flows will as far as possible be used as raw materials for agricultural production. The lowest possible volume of waste will be produced and emissions of harmful substances kept as low as possible. On the other hand, circular agriculture can cause human infection. This also generates risks and opportunities abroad.

Emission and storage of greenhouse gases – opportunity and risk: The emission of greenhouse gases can be reduced due to lower environmental burdens from agriculture, and the transformation to circular agriculture. At the same time, investing in soil quality – by adding organic material to the soil – can lead to higher CO₂ emissions; by adding organic material, more CO₂ is stored in the soil, which is subsequently degraded, resulting in higher CO₂ emissions.

Results of the appropriate assessment Natura 2000

An appropriate assessment was also undertaken in the framework of the Nature Conservation Act (*Wet natuurbescherming*) for the draft NOVI. This appropriate assessment determined whether significant negative impact can be expected for the statutory conservation targets for Natura 2000 areas as a result of policy choices. The appropriate assessment is the statutory plan-based assessment that must be undertaken for all framework-setting plans for which a significant negative impact cannot be excluded in advance. The aim of the appropriate assessment is to map out the risks of significant negative impact on the natural characteristics of the Natura 2000 network as a consequence of new policy based on the NOVI. Mitigating measures and/or policy adjustments must also be described, that are needed to prevent significant negative impact. This refers in particular to recommendations for the elaboration of implementation decisions. Where relevant, opportunities for positive effects should also be described.

The level of detail of the appropriate assessment ties in with the level of detail of the NOVI. Given the abstract character of the policy choices, the level of detail is restricted to outlines. In other words, a risk estimate. At this time, on the basis of the draft NOVI of 3 May 2019, the appropriate assessment does not result in insurmountable objections as a result of potential negative consequences for the conservation goals for Natura 2000 areas, which would prevent a decision on the draft NOVI. After all, the draft NOVI contains no specific policy choices and as yet the eventual method of policy implementation is not cast in stone. On the other hand, a number of principle policy choices could result in follow-up decisions which may lead to risks for the Natura 2000 network. Against that background, the practical implementation of certain follow-up decisions cannot be guaranteed in advance, and the consequences of these follow-up decisions for the conservation goals for Natura 2000 will have to be reassessed. The specific conclusions are summarised below, for each policy priority.

For follow-up decisions, it is important that the natural characteristics of the Natura 2000 network be taken into account. In particular through careful choice of location, negative impact can be prevented or restricted. There are additional opportunities in a nature-inclusive elaboration of the policy. By involving natural values in the elaboration of policy at an early stage, it is possible to work towards strengthening nature as far as possible. This could make a positive contribution to biodiversity in general.

<p>Policy priority 1 Space for climate adaptation and energy transition</p> <p>&</p> <p>Policy priority 2 Sustainable economic growth potential for the Netherlands</p>	<p>In the further elaboration of the various policy choices, potential risks may arise in the future as a consequence of possible negative impact on the Natura 2000 network. Spatial and economic developments on local scale can lead to increased pressure on the environment. The demand for space, fragmentation, disruption and nitrogen deposition are examples of risks which could arise if follow-up decisions lead to spatial interventions, increased numbers of transport movements or expansion of industrial processes. If these developments take place close to Natura 2000 landscapes, there is a clear risk of significant negative impact. In particular the potential growth of seaports, the accommodation of offshore wind and the creation of landfalls along the coastline are developments which could take place close to Natura 2000 areas. With that in mind, the risks of negative impact are greatest at these locations. This could have consequence for follow-up decisions and consequently the practical implementation of the policy. Water safety measures could also result in negative effects due to spatial interventions in Natura 2000 areas.</p>
<p>Policy priority 3 Strong & healthy cities and regions</p>	<p>The policy choices for this policy priority are above all focused on improving the quality of life and climate resilience of existing urban areas. Consequently, the focus is outside Natura 2000 areas. Expansion of urban areas could influence the Natura 2000 network, if network elements are located nearby. Through sound choice of location and measures at source, risks of significant negative effects can be prevented.</p>
<p>Policy priority 4 Futureproof development of rural areas</p>	<p>The policy choices for this policy priority will not bring about a significant increase in developments that cause additional pressure on the environment, such as fragmentation, disruption and manure pollution. As a result, there are no risks of significant negative effects.</p> <p>Moreover, with regard to this policy priority, there is as yet no specific elaboration of which measures will be taken to counter soil subsidence in peat pasturelands. If implementation of this measure results in entire areas being placed under water, there is a risk that this will have significant negative impact. The hydrological conditions in the Natura 2000 areas in question will then be altered to such an extent that the natural characteristics can no longer be guaranteed.</p>

Conclusions and recommendations

In a context in which many aspects of the living environment are already under pressure, the implementation of the draft NOVI – and as a consequence the effects for the state of the physical living environment – is subject to considerable uncertainty. Many of the effects can have a positive or negative influence, depending on the actual elaboration in (area-specific) programmes, the further elaboration into follow-up decisions by central, provincial and municipal government and the deployment of policy instruments. The policy choices in the draft NOVI offer both risks and opportunities for all aspects of the physical living environment; there are more opportunities than risks. Given the uncertainty – and in order to grasp the opportunities and counter the identified risks – during the further elaboration and practical implementation of the policy, it is necessary to ‘keep a tight rein’. In this respect, some form of control for a cohesive approach and cohesive monitoring of the effectiveness of the policy and of the resultant effects will be crucial, for the elaboration of follow-up decisions with due care, while maintaining the ability to grasp opportunities and manage risks.

The most important conclusions and *recommendations* are:

1. Autonomous trends and developments mean that the state of the physical living environment will come under increasing pressure between now and 2030, in general terms. Despite the efforts initiated within the regions, and the investments being made by national and regional authorities, a continuation of current policy is not expected to reverse most of the negative trends. This applies both to the safety and

health of the living environment (above all environmental health risks and the climate), good environmental quality (above all biodiversity), the economic environment (above all natural resources and the spatial economic structure) and the residential environment (above all welfare). It should also be noted with regard to the state of the living environment, that in terms of autonomous development there are regional differences, differences between town and country, differences within and outside nature areas and differences in terms of the impact perceived by the various population groups.

2. The draft NOVI is a strategic plan and contains policy choices which in broad terms set the course for a cohesive approach to creating space for climate adaptation and energy transition, for sustainable economic growth potential for the Netherlands, for strong and healthy cities and regions and for the futureproof development of rural areas. In a context in which many aspects of the physical living environment are under pressure, the policy choices represent both risks and opportunities to the physical living environment; there are more opportunities than risks. By focusing on the four priorities, it can be concluded that the policy choices do explicitly address essential (above all spatial) tasks with regard to the state of the physical living environment, including climate, natural resources and the development and sustainability of the spatial economic structure and the economy.
3. The draft NOVI contains no specific decisions that could already result in the implementation of measures. Moreover, this means that a decision on the draft NOVI will not directly result in effects, and that the consequences for the state of the physical living environment in the longer term continue to be surrounded by uncertainty. Without further elaboration of the policy into more specific follow-up decisions, and without flanking policy for the vulnerable aspects identified in this strategic environmental assessment – in particular environmental quality, health, welfare, nature and landscape – the draft NOVI is not or is barely expected to reverse the majority of negative trends. For the time being, many of the effects can be either positive or negative, depending on the follow-up decisions to be taken by national, provincial and municipal government and on the policy instruments to be employed.
4. Specific attention is called for, in particular with regard to policy choices that result in risks for the vulnerable aspects environmental quality, health, welfare, nature and landscape, because the development of the state of these aspects of the physical living environment is already under pressure, and because non-spatial elements of these vulnerable aspects are not included or at least only to a limited extent, in the policy choices in the draft NOVI. Examples include environmental quality (odour, noise, air, quiet and darkness, hazardous substances and environmental safety), health (protection and promotion), welfare and biodiversity. Moreover, specifically with regard to nature and landscape, alongside the opportunities for reversing negative trends, there are also numerous risks. There is a risk that these subjects receive insufficient attention in general terms, and in area elaborations. Without additional choices and measures, the negative trends are not expected to be reversed. *For a cohesive approach, it is recommended that additional flanking policy be drawn up or updated, as necessary, in respect of these subjects.*
5. As concerns the identified opportunities and risks, there are regional discrepancies, differences between town and country, differences within and outside protected nature areas and differences for different groups in society. *In order to do justice to these differences, area-specific, tailor-made approaches will be needed, in the practical implementation and further elaboration of the policy.*
6. Above all in large urban regions, rural areas, port and industrial areas and in the North Sea, far-reaching choices coincide, and the choices can be in open conflict with one another, or with other developments, interests and existing use. *The pressure on these areas is considerable,. An integrated consideration of the interests and opportunities and risks for these areas is therefore needed in the further elaboration of (area-specific) programmes and for follow-up decisions.*
7. The decision to focus on compact urban development and to initially undertake new housing developments within the existing urban areas, offers opportunities for the vitality and quality of the town and country (for example the preservation of green areas between the cities). However, this choice also represents risks for the environment, health and welfare, for example because it results in more residents, visitors and economic activity in the cities, where the living environment is already under considerable pressure (for example in terms of relatively poor environmental quality with regard to air, noise, odour and environmental safety). *Given the central role of compact cities in the draft NOVI, it is important that these risks be recognised at an early stage in the regional area developments, so that the*

necessary conditions can be imposed on 'compact development'; to guarantee sufficiently good conditions for the environment, health (both the fostering and protection of health) and welfare. Planting and green areas in and around the city can play an important role, and can contribute to strengthening biodiversity. It is therefore recommended that the proposed urban development strategy be elaborated for all regions where the search is underway for locations for new (residential) building.

8. Whether the opportunities and risks will actually result in effects will depend on the nature and pace of the follow-up decisions to be taken and the further elaboration of NOVI in the form of programmes and plans by national, provincial and municipal government. Given the complexity and the time required for the follow-up process and the uncertainties that are due to emerge concerning the precise elaboration of the policy – for example with regard to tailor-made area-specific solutions – it seems probable that the actual effect of a proportion of the opportunities and risks will only actually emerge in the longer term. *Given the uncertainty about the development of the state of the physical living environment, about how policy should be further elaborated, and about the occurrence of effects, it is recommended that during the implementation of the policy, the various levels of government 'keep a tight rein' on their activities. Effects into administrative cooperation will be of key importance to overcome the identified risks, in close collaboration. Cohesive monitoring of the effectiveness of the policy and of the effects that occur will be crucial for the carefully considered elaboration and further implementation of follow-up decisions, with the possibility of optimising the opportunities to be grasped, and managing the risks.*
9. Given the already referred to uncertainty about the actual implementation and further elaboration of the NOVI, and the opportunities and risks to which it will give rise, the reaching of targets is also surrounded by uncertainty. Specifically with regard to the effectiveness of the NOVI, an *Ex ante* evaluation was undertaken, as a parallel process, aimed at assessing the draft NOVI according to criteria derived from the parameters for the structural visions as contained in the Environment and Planning Act (PBL, 2019). The *Ex ante* evaluation confirmed the view that the draft NOVI leaves considerable policy leeway for future sectoral and area-specific policy programmes, and that the implementation of the policy is surrounded by uncertainty, as a consequence. The *Ex ante* evaluation also observed that certain developments demand cohesive decisions at national level. One of the recommendations of the *Ex ante* evaluation is the development of parameters for the future process, such as visions, programmes, structural agendas and perspective areas. *This SEA offers reference points for the formulation of such conditions.*
10. At an early stage in the preparations for the NOVI, at a point in time in which it offered added value to the process, alternative policy options were examined in order to lay out the boundaries of the playing field for the policy choices. The opportunities and risks in respect of the policy options for the physical living environment were also charted out, in outline; an overview is attached to this SEA in the background document assessment of policy options for the NOVI (*Beschouwing beleidsopties voor de NOVI*). This helped to develop an insight into alternative policy options with their opportunities and risks which served as a foundation for the elaboration of the draft NOVI; the Cabinet perspective published in 2018 served as a course-setting document. Moreover, throughout the preparation of the draft NOVI, the 'broad environmental relevance' was specifically considered at various points in time, as part of the SEA process. During the course of the preparation of the draft NOVI, this resulted in clear further focusing for example on the environment, health and biodiversity.
11. The appropriate assessment has at this time not resulted in insurmountable obstacles as a result of possible negative consequences for the conservation targets that apply to Natura 2000 areas, that would now form an obstacle to a decision on the draft NOVI. The draft NOVI contains no specific decisions, and the way in which the policy will eventually be implemented is not cast in stone. On the other hand, as a consequence of various principle statements that determine the course to be followed, risks may emerge in follow-up decisions with regard to the Natura 2000 network. *For that reason, the implementability of those follow-up decisions cannot be guaranteed in advance, and there will be consequences for nature, in particular Natura 2000 areas, as a result of the follow-up decisions to be taken, which will have to be assessed at that time.*

Points for attention for follow-up

The extent to which provincial and municipal governments succeed in grasping the opportunities and managing the risks for the physical living environment will depend on:

1. The agreements reached by the various levels of government about the *cooperation* in the cohesive elaboration and further implementation of the policy choices in provincial and municipal government plans, including the distribution of roles and the selected management method;
2. the *elaboration of the policy choices in follow-up decisions* on (national and regional) programmes;
3. the further choices to be made in flanking policy with regard to vulnerable subjects that are relevant for an integrated approach to the physical living environment, such as the environment, health, welfare and biodiversity;
4. the extent to which any necessary adjustments are made in time within the adaptive approach, supported by insights from cohesive monitoring and evaluation.

A number of specific areas for attention from the environmental impact assessment are mentioned briefly, below.

In cooperation agreements with provincial and municipal government and local programmes, it is recommended that agreements also be reached on vulnerable aspects of the physical living environment, specifically for policy choices which result in risks and negative trends in the state of the living environment. The eventual impact on specific aspects often depends on a combination of interventions by multiple parties tackling multiple tasks at multiple scale levels. Clear agreements on how the cohesive and combined elaboration and implementation of the NOVI is governed will be necessary to avoid leaving opportunities unutilised, and risks which could result in negative effects. This is at least of real importance in guaranteeing environmental quality in the future, for example as a consequence of choices about compact urban development. At the same time, protection of the climate and protection of natural resources, improved biodiversity and social welfare all demand attention in reaching agreements on the further elaboration and practical implementation of the NOVI.

The further elaboration of the policy within various frameworks of national, provincial and municipal government is still surrounded by uncertainty. A number of choices impact on one another, and could have consequences for the state of the physical living environment. Cohesive implementation of the policy is therefore essential, and some form of governance at overarching NOVI level is to be recommended.

In particular with regard to the further elaboration of programmes and in reaching follow-up decisions on area-specific tailor-made solutions in the regions, it is essential to take account of specific opportunities and risks, certainly in areas where far-reaching choices combine, and as a consequence impose greater pressure on the protection and development of the state of the physical living environment. Examples include area-specific tailor-made solutions for urban areas, parts of rural areas, port and industrial areas and the North Sea.

Furthermore, the NOVI proposes an adaptive approach. Monitoring and evaluation are crucial elements of making such an adaptive approach viable. To keep a tight rein on the elaboration and implementation of the policy, it is essential that 'measurement' is not only related to achieving the policy goals, but also that major uncertainties are monitored and potential (indirect) effects on vulnerable aspects of the physical living environment are kept under close observation. In order to grasp the main opportunities for vulnerable aspects and to manage risks, it is therefore essential that cooperation agreements also be reached about a cohesive system of monitoring. The recommendation is to include this activity in the monitor for the physical living environment that is due to be undertaken every two years by the Netherlands Environmental Assessment Agency (PBL).

