

# EIA plan

## Summary

### Reason and role of current EIA plan

On 8 October 2021, the Provincial Council of Limburg adopted the Provincial Strategy on Spatial Planning and the Environment (*Omgevingsvisie Limburg*) (Province of Limburg, 2021a) (further referred to as POVI21). POVI21 sets out the main lines of the long-term strategy for the physical living environment for Limburg. POVI21 also focuses on social issues.

2025 will see the updating of POVI21 adopted by the Province of Limburg in 2021. The aim of updating POVI21 is to make specific choices regarding housing, mobility, energy, nature, water, soil, climate, health, economy and agriculture, etc. for the entire province. It has also become clear from views expressed by various parties on POVI21 that it should be less general and abstract and should provide more direction and guidance.

The current document concerns an EIA plan for the update of POVI21 adopted in 2021. It answers the question of whether the intended spatial choices in POVI21 which is to be updated are sufficiently focused. The spatial choices in the Synthesis Scenarios of the Design Studies for the three Limburg regions were tested against the targets for the updated POVI21 in the EIA plan. These Design Studies are partly at the heart of the POVI21 update. The tests resulted in recommendations for updating. In addition, we also considered whether environmental impacts arise from the spatial choices.

### Assessments conducted and methods applied

From the Design Studies, all spatial choices were identified by region. For each region, we looked at whether and how spatial choices contribute to provincial targets. First, we looked at how each spatial choice contributes to each target. Subsequently, the target reach was examined for the target as a whole.

The targets as formulated in the Limburg Spatial Proposal (Province of Limburg, 2023b) were used. However, the Spatial Proposal dates from 2023 and some things have changed since then that have also been taken into account. For example, new targets have been formulated and adopted by the Provincial Council on the basis of, for example, recent policy frameworks, some targets have been adjusted and some have been dropped because of recent insights or because they are now covered by new or more specific targets.

The EIA Committee noted with regard to the POVI21 targets that they should be elaborated at regional and provincial level in such a way that they can be properly assessed (EIA Committee, 2024). This can be achieved, for example, by making targets more specific and/or quantitative and attaching certain standards to them. There has been an analysis of how SMART (Specific, Measurable, Acceptable, Realistic and Time-bound) targets are. The province can use this analysis to further specify the targets when updating POVI21.

The Scope and Detail Memorandum (*Notitie Reikwijdte en Detailniveau - NRD*) (Provincial Executive of Limburg, 2024), which was prepared for this EIA plan, shows in Appendix 2 the assessment framework used in the EIA for POVI21. The assessment framework contains 125 indicators. In consultation with the province of Limburg, it was decided not to assess all these indicators in the current EIR plan, but only those not covered by the currently applicable provincial targets.

When it is not possible to exclude effects on Natura 2000 sites in advance, an Appropriate Assessment must be drawn up under the Dutch Environment and Planning Act (*Omgevingswet*). The Appropriate Assessment identifies risks of significant impacts on the natural features and conservation objectives of the Natura 2000 network as a result of the spatial choices. The Appropriate Assessment also describes what mitigation measures can be taken or what policy adjustments can be made to avoid significant impacts. Finally, the Appropriate Assessment also identifies opportunities for positive impacts for the Natura 2000 network. The Appropriate Assessment is in line with the level of detail of POVI21, which means that it takes place mainly at outline level.

### Conclusions and recommendations

The update of POVI21 focuses on assessing the provincial targets against the reference situation and the proposed spatial choices. The EIA plan assesses the feasibility of these targets based on their substantive formulation, target reach and impacts on a number of indicators. The analysis shows that the province of Limburg is making progress on many issues, but also that there are key points of focus and areas for improvement in order to achieve the ambitions. Below are the main findings for each analysis component.

## Based on the provincial targets assessment

Based on the list of provincial targets and their analysis, this EIA plan makes the following recommendations:

- Make the theme breakdown for targets clearer. Ensure that each target falls within a specific theme. In this way, POVI21 and its policy themes become more coherent. The EIA plan provides a starting point for how this theme structure could look.
- Make sure targets are set for each theme. At present, there are still no targets for areas such as culture and sport/exercise. If no targets are formulated for certain themes, POVI21 must clearly state why this has not been done.
- Coherence between targets and indicators could be better. The assessment found that 34 indicators in the NRD (available at <https://www.commissiener.nl/adviezen/3871>) are not covered by the targets. It is advisable to include additional targets in the updated POVI21 for those aspects that the province of Limburg considers relevant. In doing so, ensure that targets and indicators are better aligned: make sure that each target has at least one indicator and that each indicator is linked to a target.
- The analysis of the targets has revealed that not all targets are SMART. Although this does not mean that they are not good targets in terms of content, it does say something about how specific, measurable and verifiable the target is. Therefore, in line with the advice of the EIA Committee, 2024, it is again recommended that all targets be detailed in such a way that they can be properly assessed. In other words, make all targets SMART or have them replaced or discarded. In section 4.2, proposals have been made for several targets to make them more measurable and verifiable.

## Based on the target reach assessment

In assessing the spatial choices in the Design Studies for the three regions, the overlapping and complementary impacts on target reach were analysed. This led to the following insights:

### Positives

The spatial choices contribute strongly to certain targets and themes:

- Landscape and spatial quality are positively addressed across the province.
- Water and nature targets are well supported in the North and Central regions.
- Mobility goals are rated positively in the North and South regions, with the exception of road safety.
- Health and safety is strongly supported in the Central and South regions.

### Points requiring attention

Several targets have a predominantly negative impact on target reach due to spatial choices hindering each other. This applies in particular to:

- Offering future prospects for agricultural businesses.
- Developing the rural economy.
- Constructing 29,550 homes by 2030 (mainly through infill and 'Straatje erbij' projects, where inner-city or compact construction is preferred because of sustainability, economy and preserving open landscape).
- Improving road safety compared with 2023.
- Acceptable noise levels along provincial roads and businesses.
- Area-specific implementation of the principle that water and soil should be guiding policy for developments in the built environment.

In addition, some targets are underrepresented, where spatial choices have little impact. This applies, for example, to:

- Improving housing affordability.
- Extracting construction materials with added social value.
- Multiple land use in case of closed landfills.

In the case of various targets, the target reach is uncertain (varying impacts on target reach). Because this varies greatly by region and the impacts on target reach are uncertain, they are not included in the province-wide conclusions and recommendations. Instead, reference is made for this purpose to each regional chapter (Chapters 7 to 9), in particular section 4 (Advice for updating POVI21) of each regional chapter.

The conclusions and recommendations are particularly relevant for the regions, but not for the province of Limburg as a whole.

### **Recommendations for updating POVI21**

Based on the above findings on target reach, the following recommendations have been made province-wide by theme:

#### **Housing**

- Draw up explicit plans to create affordable housing (social housing, mid-range rental properties and affordable owner-occupied homes), with a special focus on first-time buyers, vulnerable groups and the elderly.
- Investigate possibilities for meeting part of the housing challenge by building homes on the outskirts of towns and redeveloping agricultural buildings.
- Enable mixed-use developments in buffer zones around nature areas with limited ecological value, so that housing targets are not directly impeded.

#### **Water, soil and subsoil**

- Extend the principle that water and soil should be guiding policy to the built environment, linked to climate adaptation measures such as water retention, greening and cooling.
- Explicitly develop new water extraction and groundwater protection areas and formulate location choices based on soil and water quality.
- Use closed landfills and projects involving construction materials as promising locations for sustainable energy generation or multifunctional purposes.
- Prevent negative effects of previous coal mining and formulate clear strategies for effective action if these occur.

#### **Health and safety**

- Integrate measures to mitigate air pollution and noise nuisance, such as noise barriers, innovative road surfaces and green buffers, into spatial plans.
- Encourage noise management to improve the living environment.

#### **Mobility**

- Improve road safety by making infrastructure improvements such as safe cycle paths, roundabouts and measures to prevent speeding. Combine this with education campaigns and enforcement.
- Encourage sustainable mobility by paying explicit attention to electric vehicle charging infrastructure.

#### **Agriculture and horticulture**

- Provide clarity to agricultural entrepreneurs about future prospects and support them as regards sustainability, extensification and diversification by means of financial assistance and knowledge sharing.
- Increase opportunities for nature-inclusive agriculture, for example in buffer zones around Natura 2000 areas and NNN (Nature Network Netherlands).

#### **Energy**

- Formulate a comprehensive spatial vision for energy infrastructure and align it with other functions such as nature and mobility.
- Cluster sustainable energy generation at locations with low landscape value, near existing infrastructure.

#### **Economy**

- Encourage small-scale economic initiatives in rural areas, such as local food chains, agritourism and multifunctional land use.
- Reserve areas for innovative projects that strengthen the rural economy and offer alternatives for agricultural businesses that are under pressure.

## **Culture, sport en heritage**

- Set targets for sports. The province of Limburg can encourage sport and exercise, for example, by setting up sports facilities intended for a wider area and designing outdoor spaces to encourage physical activity. By combining sport and exercise with spatial and/or economic issues, provinces can promote sport and exercise in collaboration with municipalities.
- Set targets for culture. For example, the province of Limburg can designate space for supra-local cultural institutions, ensure that cultural education is spread evenly across the region, or actively support amateur arts.
- Protect green monuments and historically valuable landscape features by making them more sustainable and adapting their use. Encourage multifunctional use of heritage sites to increase their social and economic value and actively contribute to the quality of life and cultural identity of Limburg.

### **Based on the remaining indicators assessment**

Based on the assessment of the remaining indicators, various recommendations are made regarding the indicators (assessment framework) and the provincial targets. The full list of indicators can be found in the NRD via: <https://www.commissiemer.nl/adviezen/3871>.

For each indicator, it must be clear which source is being used and what the standard is. If no information is available about a particular indicator, the province of Limburg should take action to collect information about it. Some indicators could be better converted into targets, because monitoring the indicator alone does not provide much information. Finally, consider removing indicators that are not relevant or for which no information is available. Make sure it is clearly communicated why certain indicators are or are not included in the update of POVI21.

In addition, consistency between targets and indicators needs to be improved. 34 indicators are not covered by the targets. However, if they comprise aspects that the province of Limburg considers relevant, it is recommended that the province include additional targets in the updated POVI21. Consider, for example, targets relating to social issues, culture and sports, education, as well as work & income. In addition, align the targets and indicators more closely: ensure that each target has at least one indicator and that each indicator is linked to a target. Also make the theme breakdown for targets and indicators clearer and more unambiguous.

Based on the assessment of remaining indicators, a general point requiring attention must be identified: not all indicators can have exclusively positive effects. The province of Limburg needs to set priorities and make choices. For addressing the negative impacts, the following recommendations are being made:

- External safety: describe measures that prevent or mitigate negative impacts of spatial choices, such as developments around the Delta Rhine Corridor (DRC), railway track duplication and housing construction around railway zones. Ensure that external safety is properly safeguarded in the updated POVI21.
- Invasive alien species: describe measures that manage the risks of spread of invasive exotic species and enhance biodiversity. Connecting nature reserves can contribute to the spread of invasive alien species, but measures can be taken to control the risks. Enhancing biodiversity and containing invasive species should go hand in hand when designing ecological links. Such issues could be included in the updated POVI21.
- Soil archive/archaeological heritage: ensure conservation and development of archaeological heritage by including protection measures in spatial choices or elsewhere in POVI21. Describe clearly how these negative impacts will be prevented or mitigated. Ensure that the soil archive and/or archaeological heritage is fully considered in all spatial developments.
- International position (agricultural cluster): clearly state in the spatial choices or elsewhere in POVI21 how these negative impacts will be prevented or mitigated. Formulate strategies to support the agricultural cluster. However, the province of Limburg must also weigh up positive impacts on nature versus maintaining the international agricultural position.

For indicators that are insufficiently addressed by both the targets and the spatial choices, additional targets can be included in POVI21, as already mentioned. It is also possible to opt to focus on these aspects in the spatial choices, by making adjustments or additions.

### **Based on the Appropriate Assessment**

The Appropriate Assessment examined whether the spatial choices from the Design Studies of the different regions could have negative impacts on Natura 2000 sites. Of the 59 choices, 15 were excluded from negative impacts, while 44 choices were assessed individually. For some choices, mitigation measures can prevent significant impacts (green), but uncertainties remain for many choices, mainly due to nitrogen deposition (orange). Eight choices are considered problematic (red), because damage cannot be ruled out and there may be no or insufficient mitigating measures available to prevent or limit this. These are the following spatial choices:

- A scale upgrade for Venlo in terms of housing, facilities and mobility by means of the Brightland campus (knowledge and practical hub for agriculture and logistics), connection to the Delta Rhine Corridor and a 380kV substation.
- Weert/Nederweert (due to Brainport) and Roermond are expanding to accommodate local and regional growth.
- Keep space open or create space between the hubs.
- New Baexem-Heythuysen station with station development and modest growth in Heythuysen.
- Improving cross-border accessibility by enhancing public transport and cycle routes to economic core areas and other relevant destinations, thereby expanding the labour market.
- Urban renewal to meet quantitative and qualitative housing demand.
- Ensure that urban growth takes place within existing built-up areas and concentrate facilities in main villages.
- Strengthen the manufacturing industry and knowledge economy through campuses and university cities, with a focus on the circular economy, scale-ups and contributing to socio-economic structural reinforcement.

Due to the abstract nature of POVI21, the Appropriate Assessment primarily provides an overview of potential risks and guidelines for future plan development. It highlights the importance of mitigation measures and follow-up research to manage negative impacts. Specific projects must be examined in detail at later stages to obtain certainty about the protection of Natura 2000 areas.

Cross-border impacts on Natura 2000 sites in Germany and Belgium are ruled out because Dutch nitrogen standards are lower than the limit values in these neighbouring countries. This reduces the ecological impact outside the Netherlands.

This Appropriate Assessment lays a solid foundation for further plan development, focusing on ecological risks and mitigation. This provides the province of Limburg with a framework for effectively protecting Natura 2000 areas and making sustainable spatial planning decisions.

## Conclusion

The EIR plan for the update of POVI21 provides a detailed analysis of provincial targets, spatial choices and remaining indicators. The document highlights both the opportunities and challenges associated with spatial choices and their impact on the living environment. Although many objectives and themes are positively supported by the proposed choices, there are also various concerns and contradictions that could be further elaborated in the update of POVI21.

The analysis of provincial targets indicates the importance of a clear thematic classification. Currently, there is no clear structure, which means that some topics, such as culture and sport, are not sufficiently covered, making it difficult to ensure consistency across policy themes. In addition, many targets are not SMART, making review and monitoring difficult. The EIR plan emphasises that making targets more specific, measurable and verifiable contributes to alignment with the province's ambitions and spatial choices.

The assessment of target reach in the North, Central and South regions shows that spatial choices generally contribute strongly to certain themes such as landscape, nature, water management and mobility. At the same time, there are key areas of concern where spatial choices have a negative impact or impede each other. This applies, for example, to providing future prospects for agricultural businesses, developing the rural economy, housing affordability and improving road safety. The principle of 'more city, more countryside' in particular limits the possibilities for meeting the housing challenge, as it focuses mainly on infill development.

The remaining indicators require attention regarding a number of aspects as well. Many indicators lack standardisation and source selection, making assessment difficult. In addition, 34 indicators are not covered by the current targets, such as aspects relating to social themes, culture, sports, education and work & income. The EIA plan recommends including additional targets and improving the consistency between targets and indicators. For indicators with negative impacts, such as external safety, invasive alien species and archaeological heritage, targeted spatial choices on these themes can mitigate the negative impacts and provide protection.

The Appropriate Assessment assessed the spatial choices for their impact on Natura 2000 sites. Although many choices allow for mitigation measures, eight choices remain problematic because significant negative impacts cannot be completely excluded. These include the scale upgrade for Venlo, growth of Weert/Nederweert and Roermond, and urban renewal in the South region. The EIA plan stresses that follow-up research and mitigation measures are required to reduce ecological risks, while specific projects can be further detailed to obtain assurance on the protection of Natura 2000 sites.

The update of POVI21 may additionally take into account exogenous factors such as changes in national and international legislation, socio-economic trends and energy transition. These factors can impact the feasibility and implementation of spatial choices and their effects on achieving provincial targets.

All in all, the EIR plan provides an essential basis for the update of POVI21 and highlights the need for a more integrated and specific approach. By formulating SMART targets, setting clear priorities and taking targeted measures for underexposed and problematic themes, the province of Limburg can make a greater contribution to achieving provincial targets through the update of POVI21. The document provides valuable guidance for refining spatial choices and achieving a sustainable, future-proof spatial vision for Limburg.



## Cross-border impacts

Plans, programmes and projects subject to EIA may have significant environmental or other impacts in another country. If this is the case, the competent authority in the Netherlands must inform that country.

In view of this, the spatial choices that may have a cross-border environmental or other impact are listed below. A description is provided below the table of whether there are any potential impacts on Natura 2000 sites abroad (based on the Appropriate Assessment) and, if so, what kind of impact.

Table 13-1 | Potential cross-border environmental and other impacts of spatial choices.

	Spatial choice	What kind of cross-border impact might occur?
<b>North region</b>	The extensification of agriculture near urban centres and in stream valleys, sometimes expanded to include social services, sustainable agriculture with regional chains for healthy food and bio-based building materials.	Given the distance to Germany and Belgium, the change in water management in and around the Peelvenen fens has no impact. The extensification of agriculture can lead to a reduction in nitrogen deposition, including abroad.
	Large-scale livestock farms are given space in future-proof locations according to the principle 'the right farm in the right place'.	The interpretation of 'the right place' is of great importance for whether or not cross-border impacts arise.
	Further clustering of greenhouse horticulture and pursuit of energy efficiency with a connection to the Delta Rhine Corridor and a 380kV substation.	The Design Study identified a number of clusters for greenhouse horticulture near the border with Germany. Emissions from these clusters can have an impact across borders. The connection to the Delta Rhine Corridor may have economic impacts in Germany.
	Mobility will be improved at the supra-regional level by intensifying the Eindhoven-Venlo route and electrifying and doubling the number of tracks on the Meuse railway line between Nijmegen and Roermond, with Venray and Horst-Sevenum also serving as important hubs.	Increasing mobility at supra-regional level can increase cross-border mobility.
	The Maasduinen national park is being linked to Mookerheide and Reichswald and will focus on tranquillity, greenery and enjoyment, with the N271 road acting as a panoramic route.	Linking the Maasduinen to Mookerheide in the Province of Gelderland and Germany's Reichswald may have an impact on nature quality.
	Upgrading Venlo in terms of housing, facilities and mobility by means of the Brightland campus (knowledge and practical hub for agriculture and logistics), connection to the Delta Rhine Corridor and a 380 kV substation.	This spatial choice focuses on an international energy network via the Delta Rhine Corridor, which could have economic impacts in Germany.
	Small and medium-sized residential centres in northern Limburg are developing with targeted growth: Mook-Molenhoek and Reuver as commuter towns, Gennep as a healthcare and facilities centre, Venray and Horst with a combination of living, working and economic functions.	Places like Mook, Molenhoek, Gennep and Reuver are located on the border, so economic effects and nitrogen emissions can impact surrounding regions.
<b>Central region</b>	The natural streams Tengelroyse beek, Roggelse beek, Vlootbeek, Putbeek, Pepinusbeek, Roer and Swalm will meander again, water flow will be increased and forests will be planted along the stream valleys.	Modification of these streams could lead to improved connection with upstream sections of the streams in Germany and Belgium.
	Extensification of livestock farming is being introduced around nitrogen-overloaded streams.	This means less nitrogen deposition on nearby nature areas across the border.

	<b>Spatial choice</b>	<b>What kind of cross-border impact might occur?</b>
	Restoring old Meuse meanders, lowering river embankments and using Meuse lakes for water storage, nature and recreation.	Increasing water storage may also impact areas in Belgium along the Meuse border region.
	Track doubling and electrification of the Roermond-Venlo railway line.	Doubling the track will improve regional connections, including to and from other countries.
<b>South region</b>	Committing to national and cross-border ecological corridors to reverse fragmentation of Netherlands Nature Network (NNN).	Improving species exchange and strengthening biodiversity across national borders.
	Tackling the banks of the Meuse in Eijsden and Maastricht in terms of water safety in relation to climate adaptation, recreation and urban development.	Improved water safety and climate adaptation for both the Netherlands and Belgium, as the Meuse is an international river basin.
	Improving cross-border accessibility by enhancing public transport and cycle routes to economic core areas and other relevant destinations, thereby expanding the labour market.	A larger and better connected transport network and labour market.
	Increasing the capacity of the electricity grid (including extending 380 kV) and strategic spatial reservations (70 m) for desired routes for robust energy networks with pipelines (hydrogen backbone, Delta Rhine Corridor and heat network applications).	Improved energy supply and cooperation between the Netherlands and neighbouring countries.
	Protected area, including a 10 km buffer zone, for the Einstein Telescope.	Spatial encroachment of the protection area where restrictions apply. Strengthening international cooperation in science and technology.

### **Natura 2000 and cross-border impacts**

No negative cross-border impacts on nearby Natura 2000 sites in Germany and Belgium are expected. This has been assessed based on the potential impacts, with the main cross-border impact being nitrogen deposition. Both Germany and Belgium have different critical deposition value limits for nitrogen, which are higher than in the Netherlands. As the spatial choices are being implemented using this lower critical deposition value that applies in the Netherlands, there is no possibility of it exceeding the limit values in Germany and Belgium. This means that there will be no cross-border negative impacts on Natura 2000 areas.



# Appropriate Assessment

## Summary and final conclusion

### Impact assessment summary

This Appropriate Assessment evaluates whether there is a risk that the implementation of the spatial choices from the Design Studies drawn up for the update of POVI21 will lead to damage to the natural characteristics of nearby Natura 2000 areas. Based on a screening process, it has been determined that 15 spatial choices will not have any negative impacts on Natura 2000 areas. The remaining 44 spatial choices were assessed individually. Table 3 below summarises the final impact assessment. The traffic light method below (as explained in Chapter 1) is applied for the impact assessments in Table 3.

Colour	Nature and mitigability of impacts
Green	No or only positive effects are expected on nearby Natura 2000 areas.
Orange	Damage to the natural features of relevant Natura 2000 areas cannot be ruled out. However, it is possible to prevent or limit these impacts by taking mitigating measures, applying assessment frameworks or following certain protocols. This means the traffic light may still turn green.
Red	Damage to the natural features of nearby Natura 2000 areas cannot be ruled out. It is also uncertain whether sufficient measures are available to prevent or limit this. For spatial choices with a red rating, it is recommended to set preconditions or add nuances to the text of POVI21. When developing plans for these spatial choices, it must also be assessed whether it is necessary to undergo an ADC assessment.

Table 3 Summary of impact assessments before and after applying mitigation measures

		Impact assessments before measures	Impact assessment after measures
North	Robust Peelzone aimed at restoring wet high fens, linking the Mariapeel, Deurnsche Peel and Groote Peel with ecological connection routes.	+	
	Higher water levels will be introduced around the Peel fens, with extensive, water level-dependent agriculture and a mix of production forest and more	+	
	The extensification of agriculture near urban centres and in stream valleys, sometimes expanded to include social services, sustainable agriculture with regional chains for healthy food and bio-based building materials.	+	
	Large-scale livestock farms are given space in future-proof locations according to the principle 'the right farm in the right place'.	+	
	Further clustering of greenhouse horticulture and striving for energy efficiency with a connection to the Delta Rhine Corridor and a 380kV station.	+/-	
	Strengthening stream valleys to form green-blue cross-connections, partly through different land use, with a focus on ecology, water collection and the recreational area function close to the stream, and further away from the stream, opportunities for extensive livestock farming and arable farming and open-field cultivation higher up on the drier flanks are being explored.	+/-	

	Efforts will be made to spread recreational pressure in order to relieve the large nature reserves, with day recreation being limited to a number of visitor centres and recreational accommodation in the surrounding areas.	+/-	
	Old Meuse meanders are being reactivated for nature, flood control and as a source of drinking water.	+/-	
	Mobility will be improved at the supra-regional level by intensifying the Eindhoven-Venlo route and electrifying and doubling the number of tracks on the Meuse railway line between Nijmegen and Roermond, with Venray and Horst-Sevenum also serving as important hubs.	+/-	
	Mobility is being improved at local level by exploiting cycling potential through improvements to cycle routes and river ferries.	+/-	
	The Meuse will become a carrier of landscape and nature by restoring and expanding the Maasheggen nature area chain and by further	-	
	The Maasduinen national park is being linked to Mookerheide and Reichswald and will focus on tranquillity, greenery and enjoyment, with the N271 road acting	+	
	Upgrading Venlo in terms of housing, facilities and mobility by means of the Brightland campus (knowledge and practical hub for agriculture and logistics), connection to the Delta Rhine Corridor and a 380 kV substation.	-	
Central	Weert/Nederweert (due to Brainport) and Roermond are expanding to accommodate local and regional growth.	-	
	Keep space open or create space between the hubs.	+/-	
	Around the Peel fens, rewetting, extensification of agriculture and afforestation.	+	
	The Wet Nature Pearls ring east of Weert is becoming significantly wetter and linked together to form a robust network.	+	
	On the island of Weert, extensification of agriculture, particularly livestock farming, towards plant production for regional chains, landscape enhancement through demolition schemes/red-for-red.	+	
	Peel channels are being greened and, after purification, the water is being used for nature rewetting through smart cultivation.	+/-	
	The natural streams Tungelroyse beek, Roggelse beek, Vlootbeek, Putbeek, Pepinusbeek, Roer and Swalm will meander again, water flow will be increased and forests will be planted along the stream valleys.	-	
	Extensification of livestock farming is being introduced around nitrogen-overloaded	+	
	Restoring old Meuse meanders, lowering river embankments and using Meuse lakes for water storage, nature and recreation.	+/-	
	The Claus power plant is becoming a hydrogen plant, linked to Delta Rhine Corridor.	+/-	
	Roermond and the centres of Melick and Swalmen are developing into a central city, particularly around the railway zone.	-	
	Echt and Susteren are growing modestly, and station areas are being upgraded.	-	
	Track doubling and electrification of the Roermond-Venlo railway line.	+/-	
	Near stream valleys, Roer and Swalm valleys and nature areas such as Meinweg, focus on extensification of agriculture with strategic use of municipal land positions.	+	
	The route of the Delta Rhine Corridor will become an ecological connection above	+/-	
South	Maintaining exclusion areas where only nature development is possible (Natura 2000 areas and the Dutch Nature Network) and designating buffer zones around these areas, where existing activities that impact nature and nature restoration must be transformed.	+	
	Committing to national and cross-border ecological corridors to reverse fragmentation of Netherlands Nature Network (NNN).	+	
	Fewer restrictions on land use in the buffer zones and maintaining space for nature-inclusive agriculture, possibly with recreational co-use.	+	
	Making space for streams where possible.	+/-	
	Making space in urban areas for water infiltration and water collection.	+/-	

Different land use due to water quality requirements and the enhancement of biodiversity.	+/-	
An indicative buffer zone of 100-250 metres around streams and rivers within which leaching is limited.	+	
Tackling the banks of the Meuse in Eijsden and Maastricht in terms of water safety in relation to climate adaptation, recreation and urban development.	+/-	
Protection of sources and groundwater extraction in N2000 areas and valuable sources outside these areas.	-	+/-
Focusing on interconnected networks that offer an alternative to cars for daily travel, combined with hub development by improving the quality of station areas and densifying and clustering regional facilities, housing and businesses near stations and mobility hubs.	+/-	
Improving cross-border accessibility by enhancing public transport and cycle routes to economic core areas and other relevant destinations, thereby expanding the labour market.	+/-	+/-
During peak times, areas are selectively accessible to motorised traffic.	+	
Increasing the capacity of the electricity grid (including extending 380 kV) and strategic spatial reservations (70 m) for desired routes for robust energy networks with pipelines (hydrogen backbone, Delta Rhine Corridor and heat network applications).	+/-	
Urban renewal to meet quantitative and qualitative housing demand.	-	
Ensure that urban growth takes place within existing built-up areas and concentrate facilities in main villages.	-	
Strengthen the manufacturing industry and knowledge economy through campuses and university cities, with a focus on the circular economy, scale-ups and contributing to socio-economic structural reinforcement.	-	

The assessments show that these spatial choices entail risks of significant negative impacts on the conservation objectives of Natura 2000 sites. These potential impacts have been assessed in a worst-case scenario, which means that the most negative situation that could arise from the implementation of a spatial choice has been taken into account.. In a number of cases, the negative impacts can be mitigated or it is possible to include the spatial choice in the management plan as a conservation measure, in which case the spatial choice may be classified as green. In many cases, some of the negative effects can be mitigated, but the spatial choice remains orange or red, mainly because possible significant negative effects of nitrogen deposition cannot be ruled out with certainty.

A total of eight spatial choices are coloured red, which means that damage to the natural characteristics of Natura 2000 areas cannot be ruled out. It is also uncertain whether sufficient mitigating measures are available to prevent or limit this. The general advice given to the province of Limburg is to add more nuance to the explanation of spatial choices that are coloured red (if possible). Within a number of spatial choices, assumptions have been made about implementation where this was not explained in the text. With more nuance or clarification, uncertainties can be removed or assumptions refuted, which could result in an impact assessment turning orange or green. If this is not possible and POVI21 is adopted with the spatial choices without further nuance, an ADC test may need to be carried out for the relevant spatial choices in the planning process (depending on the actual plan implementation).

## Application of this Appropriate Assessment

This Appropriate Assessment has a relatively high level of abstraction, which is in line with the very general level at which spatial choices are included in the Design Studies.

In this regard, it is not possible in most cases to obtain certainty at this stage that plans and projects arising from POVI21 will not adversely affect the natural features of Natura 2000 areas. This Appropriate Assessment therefore mainly provides an overview of the spatial choices from the Design Studies for the update of POVI21 that may lead to ecological risks for Natura 2000 sites. The document outlines how significant impacts can be avoided by taking mitigation measures. The main purpose of this Appropriate Assessment is therefore to provide direction for further plan elaboration and research into effects of individual initiatives that will result from the spatial choices. There are opportunities to design and implement these follow-up processes in such a way as to ultimately avoid substantially impacting Natura 2000 sites.

## Cross-border impacts

No negative cross-border impacts on nearby Natura 2000 sites in Germany and Belgium are expected. This has been assessed based on the potential impacts, with the main cross-border impact being nitrogen deposition. Both Germany and Belgium have different critical deposition value limits for nitrogen, which are higher than in the Netherlands. As the spatial choices are being implemented using this lower critical deposition value that applies in the Netherlands, there is no possibility of it exceeding the limit values in Germany and Belgium. As a result, no cross-border negative effects on Natura 2000 areas are expected as a result of the spatial choices explained in the previous chapter. However, this must be assessed in more detail in individual plans/projects based on these spatial choices, as it will then be possible to determine whether there are any potential impacts on the basis of the planned activities.

## **Gaps in knowledge**

For all spatial choices assessed in this Appropriate Assessment, more in-depth and detailed research into environmental impacts is required during the further development of plans and projects. In the preparatory phase of the projects to be implemented, more knowledge about impacts will be available and can be utilised than was known at the time when this Appropriate Assessment was drawn up. This knowledge will lead to a more nuanced risk assessment than is included in this Appropriate Assessment. This will reduce uncertainty about the nature and extent of impacts. The nature and extent of impacts may vary depending on the actual location of spatial choices that are implemented and the way in which these areas are designed and developed. For all spatial choices, the current Natura 2000 designation decisions have been the starting point for the current assessments. If the conservation objectives for these Natura 2000 sites change, the impact assessments may also change.

## **Final conclusion**

The province of Limburg is currently updating POVI21. POVI21 contains a number of guiding policy choices for all three regions (north, central and south) in the form of the spatial choices. This Appropriate Assessment shows that for each region, a number of conservation measures and source measures for nitrogen reduction are being taken, which contribute to the conservation objectives of relevant Natura 2000 areas and the protection of target species. There are also a number of choices within each region that colour red, mainly due to uncertainty around potential nitrogen deposition. The province of Limburg can include additional text in the update of POVI21 to indicate that this will be taken into account in the implementation of spatial choices and how this will be done. For all spatial choices (with the exception of conservation measures), an additional Natura 2000 preliminary assessment must be carried out to determine whether there are any risks of significant negative effects on the conservation objectives of relevant Natura 2000 areas.

