

Clean energy for EU islands

Venø: Environmental and Spatial Framework for Renewable Energy Projects

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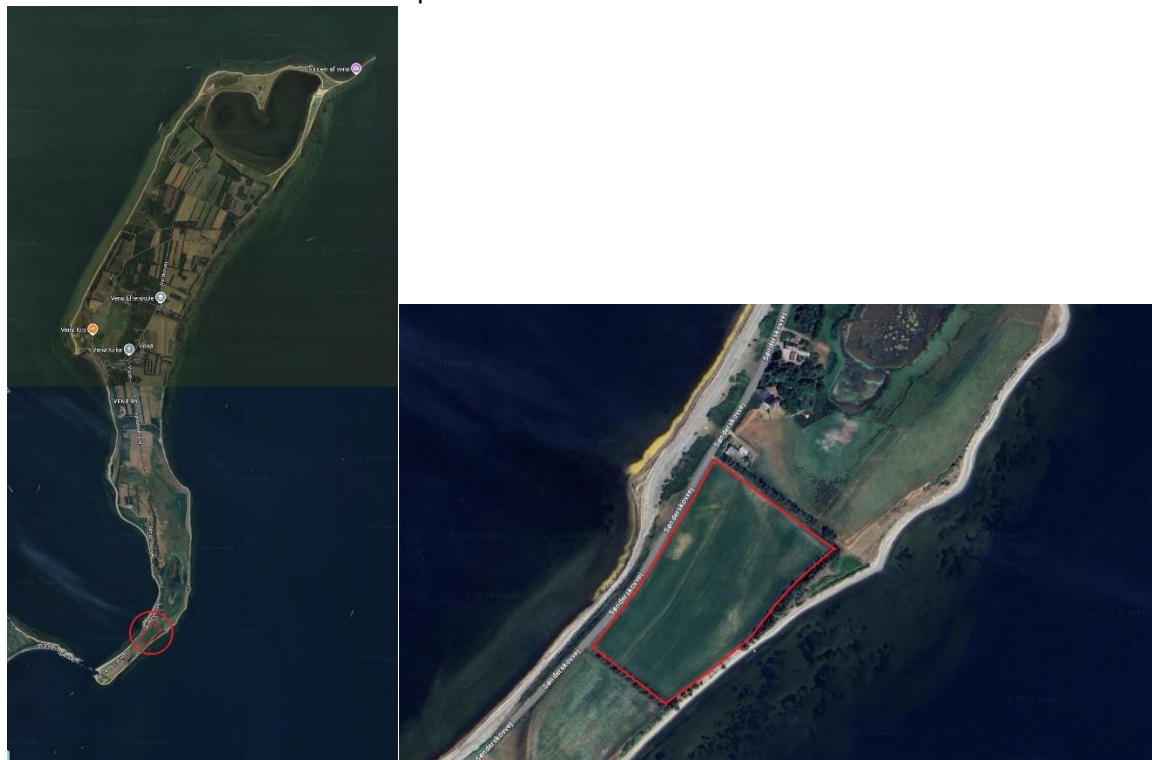
Executive Summary

In this report, the secretariat provides an overview of the legal framework for spatial and environmental planning in Denmark and explores the opportunities to develop wind turbines in selected sites in Fejø.

Spatial and environmental barriers

Venø is part of the Struer Municipality and is located in the western part of the Limfjord, between Venø Bugt and Venø Sund. The island is one of Denmark's 27 small islands; it measures 7.5 km in length and 1.5 km in width, covering an area of 6.42 km². The landscape on Venø consists of green fields, plains, forests, heaths and beach meadows. As a narrow island, projects will most likely be located in the coastal zone and in close proximity to protected land and marine areas, including Natura 2000.

The island transition team aims to develop a community-owned wind turbine. The potential area to select the site to develop wind turbines is on the south side of the island:



Municipal and local plans of Struer Municipality¹, which have been adopted on the island of Venø, can pose environmental and spatial obstacles to the development of a wind turbine. In this report, the secretariat provides an indication of the potential overlap with the selected sites for developing a wind turbine. The darker shades in the table below indicate a definite conflict between the selected site and the plans. The lighter shades in the table below indicate a potential overlap which would

¹ <https://danmarksarealinformation.miljoeportal.dk/>

need to be checked (i.e. by measuring the distance from the site). The actual risk and impact of this overlap would need to be calculated in an environmental impact assessment (EIA) procedure.

	NATURA 2000	BEACH PROTECTION LINES AND DIKES	PROTECTED AREAS	RESIDENTIAL AND BUSINESS AREAS, SUMMER HOMES AND RECREATIONAL SITES	CHURCH
Site	On the border	In the area	~100m	On the border	~3 km

Based on the secretariat's findings, most of the environmental and spatial barriers are found on the northern side of the island. The choice of a site towards the south of the island ensures that this is further away from potential overlap with environmental areas, as well as residential areas.

As one of the 27 small islands that may be exempted from spatial requirements, the beach protection line may be less of a challenge than anticipated. Nevertheless, key stakeholders will need to be engaged to ensure that construction can take place on the site. With regards to Natura 2000, the salt marshes will need to be considered. As the proposed wind turbine location is not within Natura 2000, but does border it, an environmental impact assessment would need to conclude that the risks and impact are minimal to non-existent. Accordingly, proportional mitigation or compensation measures may need to be proposed. A similar approach is necessary for protected areas, as the selected site is in the vicinity of salt marshes and meadows.

With regards to local stakeholder engagement, the site is further away from most dwellings on the island and from the church. A few dwellings are situated close to the selected areas. For these dwellings, local stakeholder engagement and discourse would be required to reach an agreement that includes appropriate mitigation and compensation measures. The community-owned feature of the wind turbine will ensure that the electricity produced is distributed on the island. This can be a useful tool to engage local stakeholders.

In addition to looking at which sites overlap with different environmental and protected areas, the secretariat analysed in more detail how the municipal plan of Struer Municipality affects the potential installation of wind turbines on the selected site on Venø.² Elements of the municipal plans of Struer municipality of relevance for Venø are:

- The island of Venø has not been included as a designated wind turbine area within the municipality.
 - This means that a separate permitting procedure needs to be initiated to be able to start the development of new wind turbines on the island.
- Existing wind turbines outside the designated areas for wind turbines cannot be rebuilt or replaced.
- Wind turbines can be placed at a distance from main roads and railways of 1x the total height of the turbine. In a zone between 1 and 1.7 times the turbine's total height, special safety conditions may apply.

² <https://struer.viewer.dkplan.niras.dk/plan/8#/6590>

- Smaller wind turbines, including household turbines, mini-turbines and micro-turbines, with a maximum total height of 25 meters can, after concrete assessment, be built in direct connection with existing buildings within a distance of approx. 20 meters in the land zone.
- Only small turbines may be built where this can be done in consideration of the municipal plan's other guidelines on the coastal zone, landscape, nature and cultural heritage, etc. Smaller wind turbines must not be erected in such a way that they hinder the erection of larger turbines.

Furthermore, all wind turbine projects must comply with the applicable requirements for noise pollution, etc. at any given time.

- Wind turbines must respect noise limits in accordance with the Statutory Order. The limits are:³
 - For dwellings, summer homes, etc.: 39 dB (wind speeds of 8 m/s) and 37 dB (wind speeds of 6 m/s)
 - For dwellings in open country: 44 dB (wind speeds of 8 m/s) and 42 dB (wind speeds of 6 m/s)

For both categories, the limit for low-frequency noise is 20 dB. The limit for low-frequency noise applies to the calculated indoor noise level at both 6 and 8 m/s wind speed.

Possibilities for mitigation and compensation measures

To accurately assess the conflict between the selected sites and environmental and protected areas, an Environmental Impact Assessment (EIA) would be necessary. The EIA procedure requires the preparation of a list of expected significant environmental impacts resulting from the construction project. This is an opportunity to measure the actual impact of a project in protected areas. In addition to clarifying the environmental consequences of a project, the EIA process may also involve examining alternatives or changes to the project. It will depend on a specific assessment in the individual case to what extent conditions should be imposed for compensation measures.

One option for compensation is to propose **replacement nature** for the site on which the project is to be developed. The classification of replacement nature is considered a remedial measure that can help to maintain the ecological functionality. It is a requirement under the Habitats Directive that the replacement nature is established before the existing nature is destroyed, and there must be a high degree of certainty that the replacement nature works to a sufficient extent not to affect the population of the species in question.

Specifically with regards to spatial planning, the Renewable Energy Act⁴ offers **schemes for compensating local citizens** affected by renewable energy projects:

- Loss of value and sale option: the installer must pay for loss of value on a residential property, equal to the amount of the loss of value as a result of the construction of the renewable energy installation (Article 6 Renewable Energy Act).

³ <https://eng.mst.dk/industry/noise/wind-turbines#regulationsonnoisefromwindturbines>

⁴ <https://www.retsinformation.dk/eli/lt/2024/1031>

- Renewable energy bonus scheme: the installers must pay an annual bonus to neighbours of the renewable energy installation within 200 metres of the project (Article 13 Renewable Energy Act).
- Green pool: the installer must pay a lump sum per MW to the municipality where the plant is built, and the compensation is used for municipal activities and local projects (Article 14 Renewable Energy Act).

Other compensation measures have also been outlined outside of legislation. For instance, with regards to **local community engagement** in the green transition.

Examples of proposed and implemented mitigation and compensation measures in Denmark where wind turbines were developed in or near natural habitat areas include.

- **Reforestation:** plant new forests at ratios of 1:2 for the site itself and 1:1 nearby to restore ecological balance and provide new habitats for species.
- **Noise mitigation** for marine mammals: during construction, hydro sound dampers such as bubble curtains and other noise-reduction technologies are used to limit underwater noise, which can disturb harbour porpoises and other marine life.
- **Buffer zones** for bird nesting areas: protected buffer zones of 3 kilometres were established around sensitive seabird nesting areas to minimise disturbance, particularly during the breeding season.
- **Bird detection systems:** to tackle bird collision risk, a proposed mitigation factor for the risk of collision is the use of detection systems during well-defined periods of bird migration, utilising radars and cameras/observers that alert to approaching birds.
- **Support for local conservation projects:** financial contributions were made to conservation initiatives aimed at restoring bird habitats in other parts of Denmark as compensation for potential impacts on migratory bird routes.
- **Operational and geographical restrictions:** restrictions in the flight path and during peak migration periods were introduced to minimise the risk of bird collisions.
- **Alternative habitat creation:** alternative feeding areas for birds have been maintained or enhanced nearby to reduce bird activity in close proximity to the wind farm.
- **Compensation measures for local residents:** neighbours will have the opportunity to apply for compensation for loss of value. This includes, among other things, a visit by a valuation authority, where the conditions in and around the property are thoroughly reviewed.
- **Plant maintenance:** the care of new and existing plants is maintained continuously, especially during the first three to five years, until the plants have established themselves. The areas between and below the solar plant will be mowed with smaller lawnmowers once or twice a year, unless they are grazed by sheep as an alternative.

Proposed next steps

Of the possible sites, those with the fewest obstacles and the most potential for compensation measures will need to be selected by the island transition team. All wind turbine projects (except single turbines less than 25 metres high and placed in the rural zone) must undergo an EIA screening. Solar PV installations must be screened if they are considered to be industrial facilities producing electricity (§16 SEA and EIA Act). In the application, it may be useful to have already spoken to relevant local stakeholders.

Environmental impact assessment

The assessment of the environmental effects of a renewable energy project should normally be prepared in the form of an environmental report. The environmental report will contain both an EIA report (an assessment of the project's environmental effects) and an environmental assessment of the planning basis (including local plans and municipal plan supplements) for the wind turbine project. The assessment of the project's impact on Natura 2000 sites must be thoroughly documented and clearly demonstrate that the project will not harm Natura 2000 areas.

The municipality is responsible for conducting the EIA process and preparing an EIA study. After at least eight weeks of public consultation on the study and the plan proposal(s), the municipal council decides whether and on which conditions an EIA permission can be granted. The granted permission must be used within three years (§§ 17, 35, and 39 of the SEA and EIA Act).

Community Aspect

In addition to the legal aspects, which are the primary focus of this report, local stakeholder engagement will be crucial to advancing renewable energy projects. The fact that the wind turbines will be community-owned ensures a more bottom-up approach to deploying renewable energy on Venø. Keeping the ownership of the installation in own hands, thereby enabling the consumption on the island, will be an important tool to address the social barriers of these projects.

Who to talk to

In order to obtain the necessary dispensations, the relevant stakeholders to speak to will be the islanders living and working on Venø. Key contacts at the municipality will also need to be contacted to further develop the plans already known by the municipality and incorporate the political agreement on dispensations for the 27 small islands in the CETA and municipal planning.

Additionally, the island of Fejø will also require dispensation. Fejø is also one of the 30 for 2030 islands. It may be beneficial to combine efforts in environmental impact assessment, as well as in increasing political focus on the need to soften rules and regulations at the national level.

The secretariat can support these stakeholder engagement activities.

List of Abbreviations

CETA	Clean Energy Transition Agenda
EEA	European Environment Agency
EIA	Environmental Impact Assessment
ESDP	European Spatial Development Perspective
EU	European Union
MS	Member State
NECP	National Energy and Climate Plan
PV	Photovoltaic
SEA	Strategic Environmental Assessment
TFEU	Treaty on the Functioning of the European Union

1. Introduction

In the third phase of the Clean energy for EU islands initiative, the secretariat provides technical support to 30 islands or island groups that have the ambition to achieve 100% renewable energy penetration by 2030.

In this report, the secretariat provides an overview of the legal framework for spatial and environmental planning in Denmark and explores the opportunities for developing wind turbines in selected sites on the island of Venø.

This report is structured as follows:

- Section 1 explores the local context of Venø and the opportunities to develop renewable energy projects.
- Section 2 provides an overview of the European legal framework for spatial and environmental planning.
- Section 3 provides an overview of the national framework for spatial and environmental planning, including possible compensation measures and renewable energy policies.
- Section 4 gives an overview of possible funding opportunities for the island transition team.

2. Venø's local context

Venø is part of the Struer Municipality and is located in the western part of the Limfjord, between Venø Bugt and Venø Sund. The island is one of Denmark's 27 small islands; it's 7.5 km long and 1.5 km wide, with an area of 6.42 km². The landscape on Venø consists of green fields, plains, forests, heaths and beach meadows. As a narrow island, projects will most likely be located in the coastal zone and in close proximity to protected land and marine areas, including Natura 2000.

The island transition team of Venø wants to advance the island's energy transition towards becoming a CO₂-neutral Island. More precisely, the team aims to harness renewable energy such as rooftop solar energy, solar cell plants, wind and water turbines, and to establish the necessary energy infrastructure and storage so that the electricity grid can provide renewable energy to the entire island.⁵ As part of the green transition in Denmark, Struer Municipality has also begun developing more renewable energy projects. Struer Municipality received a total of 12 proposals for projects, including from Venø.⁶ In 2022, the island transition team developed a Clean Energy Transition Agenda (CETA), which was submitted as a proposal for increasing renewable energy development in the Struer municipality. Currently, actions are on hold due to spatial and environmental barriers, and pending implementation of new national policies, including dispensations.⁷ In this report, the secretariat provides an overview of these barriers and outlines possible remediation measures.

In deploying renewable energy infrastructure, the small island encounters several potential complications, among others, in the following acts:

- The Environmental Impact Assessment Act and its Executive Order:⁸ the project is subject to an environmental impact assessment.
- Natura 2000:⁹ designation of Natura 2000 areas on the island of Fejø limits the selection of sites to install wind turbines.
- The Nature Conservation Act:¹⁰ the beach protection lines on the island leave little land area to build on the island.
- The Planning Act:¹¹ a rural zone permit will be required on grounds of Article 35, and permits will need to be requested to erect wind turbines on grounds of Article 11.
- Executive Order on technical certification and servicing of wind turbines:¹² the selected wind turbines will need to fulfil the certification requirements of this Executive Order, ensuring

⁵ CE4EUI, Clean Energy Transition Agenda, Venø, 7 January 2022, <https://clean-energy-islands.ec.europa.eu/countries/denmark/veno>

⁶ <https://struer.dk/borger/miljoe-natur-og-klima/energi-varme-og-klima/ve-anlaeg/de-12-forslag-fra-idehoeringen>

⁷ <https://struer.dk/borger/miljoe-natur-og-klima/energi-varme-og-klima/ve-anlaeg/de-12-forslag-fra-idehoeringen/projekt-1-venoe>

⁸ <https://www.retsinformation.dk/eli/lta/2023/4>

⁹ <https://edit.mst.dk/media/lmtb5dga/n173-natura-2000-plan-2022-27-smaalandsfarvandet-nord-for-lolland-guldborg-sund-boetoe-nor-og-hyllekrog-roedsand.pdf>

¹⁰ <https://www.retsinformation.dk/eli/lta/2024/927>

¹¹ <https://www.retsinformation.dk/eli/lta/2024/572>

¹² <https://www.retsinformation.dk/eli/lta/2020/1773>

the safety and health of persons and livestock, as well as the security of property on which the wind turbine will be installed.¹³

The island transition team aims to develop a community-owned wind turbine. The potential area to select the site to develop wind turbines is on the south side of the island, as indicated in Figure 1 below.



Figure 1: Proposed site for wind turbines in Venø

As described in more detail below, most environmental and spatial barriers are located on the northern side of the island. The choice of a site towards the south of the island ensures that this is further away from potential overlap with environmental areas, as well as residential areas.

¹³ In the secretariat's report from June 2024, it is also advised that once the island transition team identifies the preferred configuration of the wind turbine, the grid connection should be analysed together with the wind turbine manufacturer/provider.

2.1. Local and Municipal Plans

In this section, the secretariat gives an overview of the relevant municipal and local plans of Struer Municipality that have been adopted on the island of Venø. Per plan, the secretariat gives an indication of the potential overlap with the possible sites for developing a wind turbine.



Figure 2: Protected areas¹⁴

Protected areas in Venø are spread over the island. The different colours represent the following types of areas:

- Purple: heaths (*hedde*)
- Dark blue: lakes (*sø*)
- Brown: marshes (*mosa*)
- Light blue: salt marshes (*strandeng*)
- Yellow: pastures (*overdrev*)
- Green: meadows (*eng*)

Based on an approximate measurement using Google Maps, the lake and meadows are approximately 120 metres away from the selected area for the wind turbine. The selected area also overlaps with the salt marshes on the south side of the island. For this site, an environmental impact assessment would need to conclude that there is no or limited risk of impact on these protected areas.

¹⁴ <https://danmarksarealinformation.miljoportal.dk/>

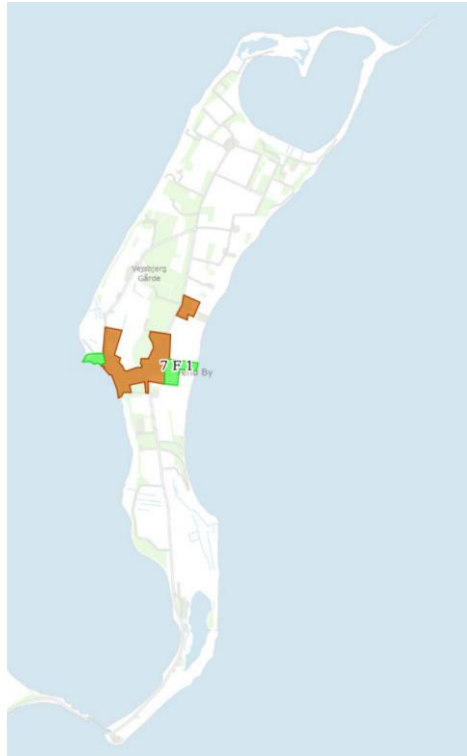


Figure 3: Residential and business areas, summer homes and recreational sites¹⁵

The municipal plans govern mixed residential and commercial areas, as well as areas for public purposes, summer homes, and recreational areas. Based on an approximate measurement using Google Maps, the nearest built sites in accordance with the plans are approximately 2.8 km away from the selected area. Using satellite images, the nearest built construction to the selected area borders the site directly. Another dwelling is located approximately 100 metres to the north of the area, and another dwelling is approximately 300 metres to the southwest of the area. This means that for all sites less than one kilometre away, a constructive dialogue and agreement must be reached with the neighbouring areas. An exact measurement of the distance, the associated risks, and the agreements with the neighbours would need to be included in an environmental impact assessment. Additionally, dispensation and compensation measures may need to be proposed as part of the environmental impact assessment.¹⁶

¹⁵ <https://kort.Struer.dk/spatialmap>

¹⁶ For more details on compensations measures please see sections 1.4 and 1.5 of this report.

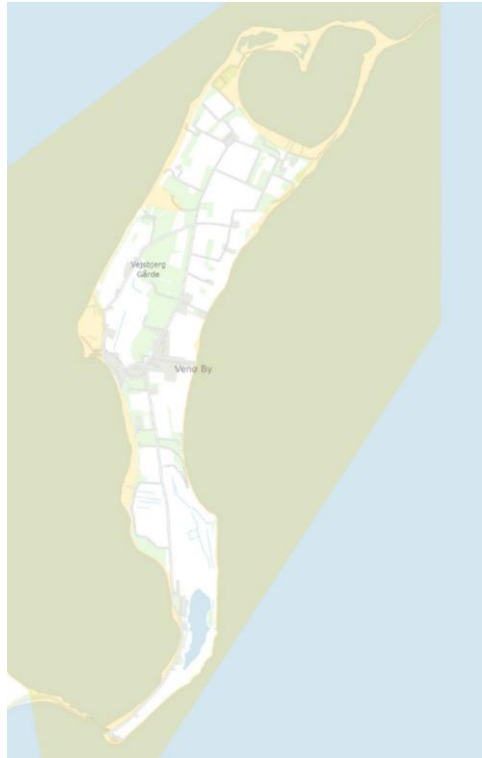


Figure 4: Natura 2000¹⁷

The two Natura 2000 sites, which protect birds and habitats, overlap on the island of Venø. The beach meadows cover approximately half of the outer edge around Venø and are protected under Natura 2000, along with the surrounding sea. A wild bird reserve is located at Nørskov Vig, the northern part of the island. The wild bird reserve is a part of Natura 2000 and protects wildlife during the breeding season from 1 April to 15 July.¹⁸ For the selected area of the project, the risk associated with installing a wind turbine needs to be assessed. An environmental impact assessment would need to conclude that there is no or minimal risk in installing wind turbines nearby. Accordingly, proportional compensation measures may need to be proposed in order to install wind turbines in that area.

¹⁷ <https://danmarksarealinformation.miljoportal.dk/>

¹⁸ CE4EUI, Clean Energy Transition Agenda, Venø, 7 January 2022, <https://clean-energy-islands.ec.europa.eu/countries/denmark/veno>

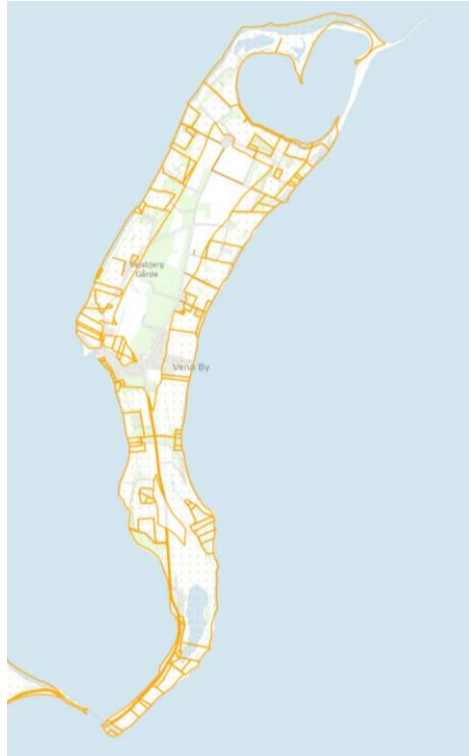


Figure 5: Beach protection lines and dikes¹⁹

The beach protection line, 300 metres from the shore, is visualised in the map above. Preferably, wind turbines should be established outside of these zones. In selecting the site, the existing stone and dike constructions should also be considered, albeit as a practical obstacle more than a legal one. In principle, since the selected site falls within the 300-metre beach protection line, a dispensation would need to be requested.²⁰ However, as one of the 27 small Danish islands, Venø falls under the group of islands for which the national government has agreed to remove the requirement for special planning or functional justification for coastal location when planning for facilities in the open country in the coastal zone.²¹ Alternatively, there are two areas on the island that do not fall within the beach protection lines. These areas would not need to be exempted.

¹⁹ <https://danmarksarealinformation.miljoportal.dk/>

²⁰ For more details on the dispensation please see sections 1.4 and 1.5 of this report.

²¹ Please see section 1.4.1 of this report for more details.

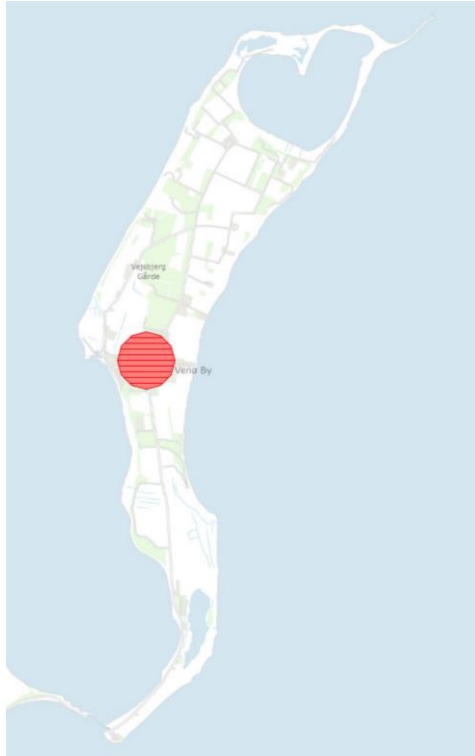


Figure 6: Church boundaries²²

No constructions can be built within the church boundaries as designated by the circle in the map above. Based on an approximate measurement using Google Maps, the church boundary appears to be roughly 3 km away from the selected area.

²² <https://danmarksarealinformation.miljoportal.dk/>

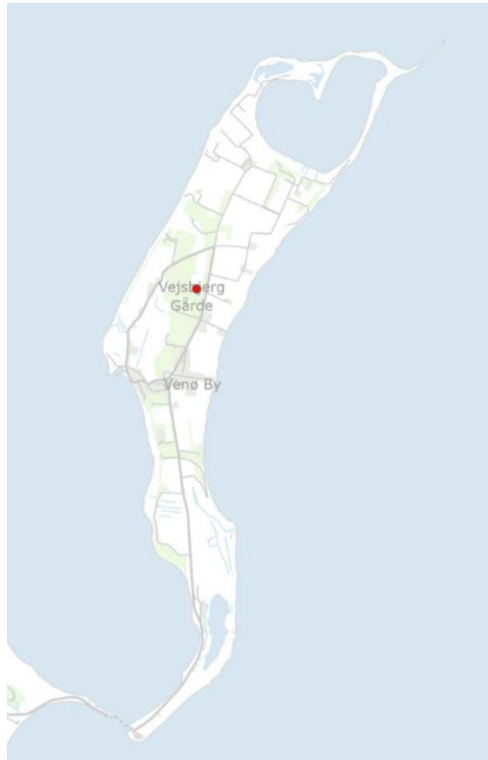


Figure 7: Borehole protection line²³

The municipalities are required under the Supplement to the Agreement on Pesticide Strategy 2017-2021 to review all drilling-near protection areas (BNBO) on agricultural land and other areas where pesticides are used for commercial purposes up to and including 2022. This is to assess the need for further protection efforts. This boundary is approximately 3 km away from the selected site and should not have an impact on building a wind turbine on the south of the island.

²³ <https://danmarksarealinformation.miljoportal.dk/>

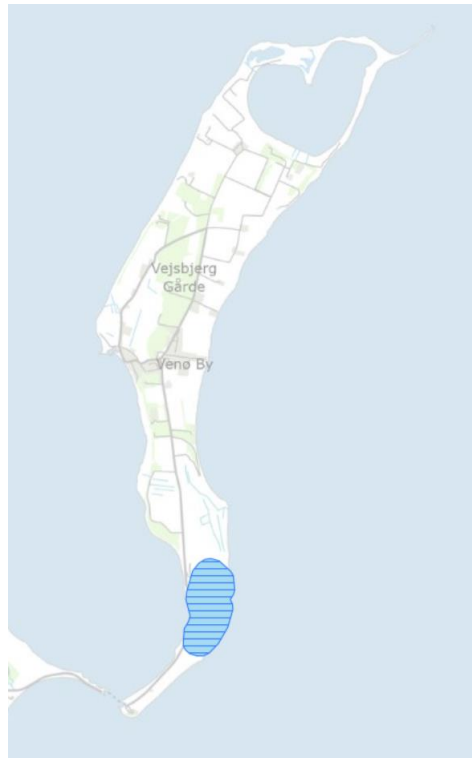


Figure 8: Lake protection line²⁴

The lake protection line aims to secure lakes as valuable landscape elements and as habitats and dispersal corridors for plants and wildlife. Within the protection line, there is generally a ban on changes, i.e., no settlements may be placed, no changes in the terrain, and no planting, etc. The south side of the boundary borders the selected site. The wind turbine may therefore not be developed on the part that overlaps with the boundary. Additionally, an environmental impact assessment would need to conclude that a turbine at a specific distance from this boundary would pose no or minimal risks and have a negative impact.

2.1.1. Summary

The secretariat summarises the potential obstacles per possible site in the table below. The darker shades indicate a certain obstacle between the selected site and the plans. The lighter shades indicate a potential overlap which would need to be checked (i.e. by measuring the distance from the site).

	NATURA 2000	BEACH PROTECTION LINES AND DIKES	PROTECTED AREAS	RESIDENTIAL AND BUSINESS AREAS, SUMMER HOMES AND RECREATIONAL SITES	CHURCH
Site (figure 1)	On the border	In the area	~100m	On the border	~3 km

²⁴ <https://danmarksarealinformation.miljoeportal.dk/>

Based on these findings, as one of the 27 small islands that may be exempted from spatial requirements, the beach protection line may be less of a challenge than anticipated. Nevertheless, key stakeholders will need to be engaged to ensure that construction can take place on the site. With regards to Natura 2000, the salt marshes will need to be considered. As the proposed wind turbine location is not within Natura 2000, but does border it, an environmental impact assessment would need to conclude that the risks and impact are minimal to non-existent. Accordingly, proportional mitigation or compensation measures may need to be proposed.²⁵ A similar approach is necessary for protected areas, as the selected site is in the vicinity of salt marshes and meadows.

Regarding local stakeholder engagement, the site is located further away from most dwellings on the island and from the church. A few dwellings are situated close to the selected areas. For these dwellings, local stakeholder engagement and discourse would be required to reach an agreement that includes appropriate mitigation and compensation measures. The community-owned feature of the wind turbine will ensure that the electricity produced is distributed on the island. This can be a valuable tool for engaging local stakeholders.

2.2. More details on the plans

Municipal plans must contain guidelines for the location of consequential areas around technical facilities, wind turbines, and noisy leisure facilities, etc., in the land zone, which must be kept clear of new noise-sensitive use (§11a. sub. 1, no.29 Planning Act). Elements of the municipal plans of Struer municipality of relevance for Venø are:²⁶

- The island of Venø has not been included as a designated wind turbine area within the municipality.
 - This means that a separate permitting procedure needs to be initiated to be able to start the development of new wind turbines on the island.
- Existing wind turbines outside the designated areas for wind turbines cannot be rebuilt or replaced.
- Wind turbines can be placed at a distance from main roads and railways of 1x the total height of the turbine. In a zone between 1 and 1.7 times the turbine's total height, special safety conditions may apply.
- Smaller wind turbines, including household turbines, mini-turbines, and micro-turbines, with a maximum total height of 25 metres, can, after a concrete assessment, be built in direct connection with existing buildings within a distance of approximately 20 metres in the land zone.
- Only small turbines may be built where this can be done in consideration of the municipal plan's other guidelines on the coastal zone, landscape, nature and cultural heritage, etc. Smaller wind turbines must not be erected in such a way that they hinder the erection of larger turbines.

Furthermore, all wind turbine projects must comply with the applicable requirements for noise pollution, etc., at any given time.

²⁵ For examples of compensation measures, please see sections 1.4 and 1.5 of this report.

²⁶ <https://struer.viewer.dkplan.niras.dk/plan/8#/6590>

- Wind turbines must respect noise limits in accordance with the Statutory Order. The limits are:²⁷
 - For dwellings, summer homes, etc.: 39 dB (wind speeds of 8 m/s) and 37 dB (wind speeds of 6 m/s)
 - For dwellings in open country: 44 dB (wind speeds of 8 m/s) and 42 dB (wind speeds of 6 m/s)
 - For both categories, the limit for low-frequency noise is 20 dB. The limit for low-frequency noise applies to the calculated indoor noise level at both 6 and 8 m/s wind speed.

2.3. Spatial and environmental restrictions

In this section, the secretariat examines the spatial and environmental restrictions that are specifically relevant for installing wind turbines in Venø. Based on the overview of the municipal and local plans and relevant passages in national legislation, the specific spatial and environmental restrictions for installing wind turbines in Venø are:

- The island is part of a Natura 2000 designated area.
- It is forbidden to place any turbines closer than 300 metres from the beach protection areas.

2.3.1. Natura 2000

The goal behind the Natura 2000 plan is to stop the decline of nature in Denmark. The Natura 2000 plan is binding and serves as a basis for local authorities in their land management, nature management or when exercising their powers in accordance with the legislation. The Natura 2000 plan does not override other legislation, and the efforts undertaken to ensure its implementation must comply with the necessary permits, exemptions, and dispensations, based on impact assessments, among other requirements.

In Struer Municipality, a specific Natura 2000 plan has been written for Venø and Venø Sund. Specifically around the island of Venø, the Natura 2000 area is only included with the coastal stretches.²⁸

Looking at the assessments in the three Natura 2000 planning cycles for the region of Venø and Venø Sund, salt marshes (*strandeng*), coves and inlets (*bugter og vige*), and sand banks (*sandbankerne*) are the most important protected sites. Salt marshes are the most widespread ecosystem in the area in terms of extent. Approximately 80% is in a good to high natural state due to the operation and the resulting good structures.

Coves, inlets, and sea lakes are listed as two of the protected marine habitats. Four marine habitat types were mapped, including bays and inlets, sandbanks, rocky and coastal lagoons, and beach lakes. Coves and inlets make up almost the entire sea area around Venø within the habitat area and enclose the other three nature types. In particular, the central part of the habitat area along the

²⁷ <https://eng.mst.dk/industry/noise/wind-turbines#regulationsonnoisefromwindturbines>

²⁸ <https://mst.dk/media/te5h4a5m/n62-natura-2000-plan-2022-27-venoe-venoe-sund.pdf>

shores of Venø is characterised by sand banks. The stone reefs lie along the sandbanks and can be seen in the northern, southern and western parts of the area.

Regarding species, bird populations that use the islands as stopovers during migration seasons are protected in the designated Natura 2000 areas.²⁹ Three birds in particular are mapped for the area: the water clyde (*klyde*), the arctic tern (*havterne*), and the little tern (*dværgterne*). There is a single habitat for the birds in Nørskov Vig at the northern end of Venø. The habitat is landlocked from the rest of Venø, so there is a potential risk of predation from land-dwelling predatory mammals; however, there are hardly any foxes on the island.

The main risks of installing a wind turbine near a Natura 2000 area relate to bird populations that use the islands as stopovers during migration, and to habitats, specifically in the form of salt marshes (*strandeng*), coves and inlets (*bugter og vige*) and sand banks (*sandbankerne*). Regarding the bird, the chosen site should be sufficiently far away from the habitat to avoid posing any risk to the Natura 2000 area. Nevertheless, an environmental impact assessment would have to calculate the actual impact on the bird populations and their habitats.

2.3.2. Beach protection line

The provision regarding beach protection lines was introduced in the Nature Conservation Act in 1937.³⁰ Beach protection meant a ban on construction within 100 metres of the water's edge. Dune conservation has aimed to combat sand migration since 1867. In 1992, this provision also became part of the Nature Conservation Act and thus established an equivalent of the beach protection line, which aims to secure natural and landscape values.

The beach protection line was most recently extended from 100 metres to 300 metres. To provide more space for outdoor activities and tourism along the coasts, in 2017, the Danish Parliament adopted a relaxation of the Nature Conservation Act. In summerhouse areas, the beach restriction line remains 100 metres.³¹

The beach protection line and the dune conservation line must not be confused with the coastal proximity zone. The rules for the coastal proximity zone apply to municipalities, which must take special account when drawing up municipal and local plans in coastal areas. This is a planning zone.³²

2.4. Opportunities to develop renewable energy installations

A site being marked as Natura 2000 does not automatically mean that renewable energy projects cannot be developed there. In this section, the secretariat provides an overview of potential mitigation and compensation measures for developing projects in nature sites in Denmark.

2.4.1. Government agreement for rural areas

As a significant contribution to strengthening and liberating rural districts, on 10 October 2024, the Danish government published an agreement between political parties on growth and development

²⁹ <https://mst.dk/media/te5h4a5m/n62-natura-2000-plan-2022-27-venoe-venoe-sund.pdf>

³⁰

³¹ <https://kyst.dk/kystzonen/strandbeskyttelse/ansoeg-om-dispensation>

³² <https://www.planinfo.dk/plantemaer/kystnaerhedszonen>

in rural areas.³³ The agreement comprises concrete actions to implement several changes to the Planning Act and other relevant legislation. Two relevant actions for Venø are:

- Action 10: New opportunities on small and medium-sized islands in relation to the coastal zone (*Nye muligheder på små og mellemstore øer ift. Kystnærhedszonen*)
- Action 11: New opportunities on 27 small islands compared to beach protection (*Nye muligheder på 27 små øer ift. Strandbeskyttelse*)

Regarding Action 10, the government has agreed to remove the requirement for spatial planning or functional justification for coastal locations when planning facilities in the open country in the coastal zone, including 27 small islands, 14 small and medium-sized bridged and land-locked islands, and the five island municipalities that have municipal status. This dispensation includes Venø as one of the 27 small Danish Islands.

While there is more room to build in the coastal proximity zones, the agreement explicitly states that no new opportunities for solar cell installations are opened in the coastal zone. Additionally, by requiring the municipalities to provide a general justification for the planning proposal, it must also be ensured that new facilities are placed as far away from the coast as possible. Wind and other renewable energy facilities are not explicitly excluded in this agreement. It will therefore be advisable to use the momentum of this agreement to push for possibilities to build within the coastal restriction zones.

On the one hand, the agreement does not change the fact that the Planning Act continues to specifically aim for the open coasts to constitute a significant natural value and landscape value. There will continue to be a number of other requirements, such as safeguarding landscape interests, protected nature or nature protected under Section 3 of the Nature Conservation Act. On the other hand, however, the room has been opened to facilitate the use of more renewables. This means that the barriers listed in this report remain potential obstacles; however, there is an opportunity to engage with relevant politicians and local stakeholders to obtain approval for construction on the selected site.

While requirements remain to protect nature, **Action 11** enables easier access to development within the coastal zone and the beach protection line. Due to the limited size of the islands, coastal restrictions set a narrow framework for the development possibilities. Under the agreement, the 27 small islands can make adjustments to their island development plan. The proposal implies that within the framework of an island development plan that has been approved by the Minister for Towns and Rural Districts and the Minister for the Environment, a dispensation can be granted by the municipal council and the Ministry of the Environment/Coastal Directorate from the Planning Act and the Nature Conservation Act on specific terms. For Venø, the relevant contacts at Struer municipality are the Director of Technology and Culture and the Head of the Department for Planning and Environment. The CETA can be supplemented to include adjustments to the island development plans, focusing on renewable energy projects to obtain the necessary dispensations. Key stakeholders' engagement will be beneficial in incorporating these elements of the agreement into future municipal planning.

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https://www.blkm.dk/fileadmin/share/dokumenter/Aftale_om_planloven_for_2024._Vaekst_og_udvikling_i_landdistrikt_erne_gennem_aendring_af_planloven.pdf

2.4.2. Exemption of the beach protection lines

In addition to the abovementioned agreement, it is possible to apply for an exemption from the beach protection line at the Coastal Directorate of the Ministry for the Environment. Dispensations can only be granted for setting up wind turbines within the dune protection and the beach protection line in special cases. Access roads, engineering buildings, wing projections, etc., also require exemption. On the grounds of §65b(2) Nature Conservation Act, exceptions apply when it is necessary to realise a local or municipal plan for the development of wind turbines. The Board's decisions can be appealed to the Environment and Food Complaints Board.

In practice, the exemption appears to be very restrictive. For example, in August 2024, the Board rejected an application to construct a wind turbine on the border of the beach protection line, where the blades would extend beyond the designated beach protection area.³⁴

Nevertheless, exemptions do happen. In 2019, the Board approved the construction of wind turbines with blades over the beach protection line on the property in Lyngs in Struer Municipality. The reasons for approval include:³⁵

- Building the wind turbine in this location was necessary to realise the municipality's local plan, cf. §65b(2) Nature Conservation Act.
- The environmental report assessed that the application did not have a significant impact on the Natura 2000 area.
- The environmental report assessed that the application did not have a significant impact on plant species or breeding and resting areas for the animal species listed in Annex IV of the Habitats Directive.
- Based on the analyses in the environmental report, the Danish Coastal Authority reached the same assessment.

2.4.3. Replacement Nature

Under the Danish Nature Package Agreement, it was established that natural areas can pose an obstacle for project development by businesses and public authorities. A room was created to look at possible compensation measures when developing projects in or near natural areas. Subsequently, in September 2018, a report from DCE, Aarhus University, was published highlighting the possibilities for creating replacement nature in relation to habitats and species.³⁶

The report states that the establishment and location of the replacement nature can be done in collaboration between the landowner and the authorities, so that the establishment of new nature is targeted at areas where more coherent nature is desired.

Rules regarding replacement nature must be designed so that new nature is created that is larger/better in scope and quality than the area where the protection is lifted. The new habitat

³⁴ <https://kyst.dk/media/122larqa/23-04788-afslag-til-etablering-af-vingeoverslag-fra-vindmoelle.pdf>

³⁵ <https://kyst.dk/media/tpapdcvu/19-01866-dispensation-til-at-opfoere-to-vindmoeller-med-vingeoverslag-over-strandbeskyttelseslinjen.pdf>

³⁶ <https://mst.dk/erhverv/rig-natur/naturbeskyttelse/3-beskyttede-naturtyper/etablering-af-erstatningsnatur>

established does not necessarily have to be exactly the same type as the one for which the protection is lifted.

Aarhus University states that it is often also difficult to establish the replacement nature of similar quality within a 30 to 50-year time horizon. This applies to grasslands, natural meadows, rich fens and heaths, salt marshes and dune habitats. There are also very large differences in how quickly species respond to the development of new suitable habitats and whether species are introduced once the habitats have been established. As such, Aarhus University recommends that replacement nature should be established well in advance of the original habitat being abandoned, so that animals and plants can spread to the new habitat and the replacement nature can meet the species' requirements as a habitat.

The report also summarises the relevant phases during a project for establishing the replacement nature:

- **Preliminary study** of the area that is to be closed down with a view to mapping which natural values exist and whether there are plant and animal species that should be sought to be moved.
- **Screening of suitable areas** to establish a replacement nature: it will typically be necessary to carry out screenings of suitable areas, mapping and preliminary investigations of the area, as well as obtaining the necessary permits from the authorities.
- **Dialogue and agreements with landowners:** any purchase price, compensation availability or land distribution can be a significant expense item.
- **Mapping initial costs** for planning, preparation and construction, as well as possible relocation of species.
- **Long-term planning:** ensure observation and maintenance of nature conservation for a number of years.

2.4.4. Compensation schemes under the Renewable Energy Act

At the intersection of nature conservation and renewable energy projects, the Renewable Energy Act offers schemes for compensating local citizens affected by renewable energy projects:³⁷

- **Loss of value and sale option:** the installer must pay for loss of value on a residential property, equal to the amount of the loss of value resulting from the construction of the renewable energy installation (§6 Renewable Energy Act). Alternatively, landowners can sell their property to the renewable energy plant owner if there is an estimated value loss of more than 1 per cent.
- **Renewable energy bonus scheme:** the installers must pay an annual bonus to neighbours of the renewable energy installation within 200 metres of the project (§13 Renewable Energy Act).
- **Green pool:** the installer must pay a lump sum per MW to the municipality where the plant is built, and the compensation is used for municipal activities and local projects (§14 Renewable Energy Act).

³⁷ More information on these schemes can also be found on the website of the Danish Energy Agency: <https://ens.dk/ansvarsomraader/stoette-til-vedvarende-energi/fremme-af-udbygning-med-vindmoeller>

2.4.5. Local stakeholder engagement

Other compensation measures have also been outlined outside of legislation. For instance, the Landdistrikters Fællesråd, a non-profit representing rural districts, recently published a guide on local community engagement in the green transition. The organisation proposes compensation measures that focus on engaging the local stakeholders.³⁸ Renewable energy project developers can offer:

- Annual compensation to the local community: instead of contributing to a green pool to the local authority, the sum can also be donated to a relevant local association closer to the ground.
- Cheaper electricity or a local discount to local stakeholders of the energy generated from the renewable energy installation.
 - This solution has potential but currently does not fit in the legal framework – there is mid- to long-term potential if legislation follows suit. Possibilities can be created, for instance, through sandbox regulation mechanisms.
- A higher compensation than that calculated by the municipality on the basis of the Renewable Energy Act.
- A local share (co-ownership) of the installation to local stakeholders, providing an incentive for the project.

2.5. Examples of compensation measures

In this section, the secretariat gives examples of sites in Denmark where compensatory measures were implemented or proposed for wind turbine developments in or near Natura 2000 areas.

2.5.1. Østerild National Test Centre

In Thy, North Jutland, large wind turbines are being tested near Natura 2000 sites covering forests, coastal habitats, and the Veljerne bird sanctuary. Compensation measures for the testing site include:³⁹

- **Reforestation:** the test site was instructed to plant new forests at ratios of 1:2 for the test site itself and 1:1 nearby to restore ecological balance and provide new habitats for species.
- **Wildlife and birds:** due to the distance from nearby Natura 2000 sites, the risks of collisions with birds and wildlife were deemed minimal; therefore, no mitigation measures were necessary.

2.5.2. Kriegers Flak and Kattegat Offshore Wind Farm

Kriegers Flak is an offshore wind farm in the Baltic Sea, near Natura 2000 marine sites designated for harbour porpoises and seabirds. The project impacts bird migration routes and marine mammals, particularly due to underwater noise and the risk of habitat disruption. In the environmental impact assessment for this wind farm, several compensation measures are proposed:

³⁸ https://www.landdistrikterne.dk/wp-content/uploads/sites/5/2024/10/YIMBY-ONLINE-VERSION_FINAL_WEB.pdf

³⁹ https://ens.dk/sites/ens.dk/files/Globalcooperation/report_on_oesterild_test_centre_-_lessons_learned.pdf

- **Noise mitigation** for marine mammals: during construction, hydro sound dampers such as bubble curtains and other noise-reduction technologies should be used to limit underwater noise, which can disturb harbour porpoises and other marine life.⁴⁰
- **Buffer zones** for bird nesting areas: protected buffer zones of 3 km were established around sensitive seabird nesting areas to minimise disturbance, particularly during the breeding season.⁴¹
- **Bird detection systems**: to tackle bird collision risk, a proposed mitigation factor for the risk of collision was the use of detection systems during the well-defined periods of bird migration using radars and cameras/observers that inform of approaching birds.
- **Support for local conservation projects**: financial contributions were made to conservation initiatives aimed at restoring bird habitats in other parts of Denmark as compensation for potential impacts on migratory bird routes.

2.5.3. Nørrekær Enge Wind Farm

The windfarm is established near Nørrekær Enge, North Jutland, close to the Natura 2000-protected Limfjorden area, which is a significant habitat for migratory and breeding birds. Compensation measures include:⁴²

- **Operational and geographical restrictions**: restrictions were introduced in the flight path and during peak migration periods to minimise the risk of bird collisions.
- **Alternative habitat creation**: alternative feeding areas for birds have been maintained or enhanced nearby to reduce bird activity in close proximity to the wind farm.

2.5.4. Dalsgaard Solar Park

Solar panels are being installed at Dalsgaard, near Natura 2000 sites that protect lakes and the following animals: marsh snail, sea lamprey, brook lamprey, river lamprey, stickleback, large newt, porpoise, otter, spotted seal, and mosquito flower. Compensation measures from the environmental impact assessment include:

- **Compensation measures for residents**: neighbours will have the opportunity to apply for compensation for loss of value. This includes, among other things, a visit by a valuation authority, where the conditions in and around the property are thoroughly reviewed.
- **Plant maintenance**: the care of new and existing plants is maintained continuously, especially during the first three to five years, until the plants have established themselves. The areas between and below the solar plant will be mowed with smaller lawnmowers once or twice a year, unless they are grazed by sheep as an alternative.

2.6. Proposed next steps

Of the possible sites, those with the fewest obstacles and the most potential for compensation measures will need to be selected by the island transition team. All wind turbine projects (except

⁴⁰ https://ens.dk/sites/ens.dk/files/Vindmoller_hav/miljoerapport_kattegat-kriegers_flak_ii_-_bilag_1_n2000_vaesentlighedsvurdering.pdf

⁴¹ https://ens.dk/sites/ens.dk/files/Vindenergi/kriegers_flak_offshore_wind_farm_eia_birds_and_bats_technical_report.pdf

⁴² http://apps.aalborgkommune.dk/images/teknisk/PLANBYG/miljoevurdering/10/Kp10-007_Lp10-7-101_Miljoerapport08-side165-185.pdf

single turbines less than 25 metres high and placed in the rural zone) must undergo an EIA screening. Solar PV installations must be screened if they are considered to be industrial facilities producing electricity (§16 SEA and EIA Act). In the application, it may be useful to already speak to relevant local stakeholders.

2.6.1. Environmental impact assessment

The assessment of the environmental effects of a renewable energy project should normally be prepared in the form of an environmental report. The environmental report will contain both an EIA report (assessment of the effects on the environment of the project itself) and an environmental assessment of the planning basis (local plans and municipal plan supplements) for the wind turbine project. The assessment of the project's impact on Natura 2000 sites must be sufficiently documented and clearly show that the project will not damage Natura 2000 areas.

The municipality is responsible for conducting the EIA process and preparing an EIA study. After at least eight weeks of public consultation on the study and the plan proposal(s), the municipal council decides whether and on which conditions an EIA permission can be granted. The granted permission must be used within three years (§§ 17, 35 and 39 SEA and EIA Act).

2.6.2. Community Aspect

In addition to the legal aspects, which are the focus of this report, local stakeholder engagement will be key to moving renewable energy projects forward. The fact that the wind turbines will be community-owned ensures a more bottom-up approach to deploying renewable energy on Venø. Keeping the ownership of the installation in own hands, thereby enabling the consumption on the island, will be an important tool to address the social barriers of these projects.

2.6.3. Who to talk to

In order to obtain the necessary dispensations, the relevant stakeholders to speak to will be the islanders living and working on Venø. Key contacts at the municipality will also need to be contacted to further develop the plans already known by the municipality and incorporate the political agreement on dispensations for the 27 small islands in the CETA and municipal planning.

Additionally, the island of Fejø will also require dispensation. Fejø is also one of the 30 for 2030 islands. It may be beneficial to combine efforts in environmental impact assessment, as well as in increasing political focus on the need to soften rules and regulations at the national level.

The secretariat can support these stakeholder engagement activities.

3. Legal framework: Europe

The European Union's framework for environmental and spatial planning integrates environmental protection and sustainable development through several regulations and directives. The objective is to balance economic development with the need for sustainable land and resource use, aligning with EU-wide goals, such as those outlined in the European Green Deal.

The multi-layered approach enables the EU to integrate environmental considerations into its spatial planning efforts while pursuing its overarching goals for sustainability and green growth.

The EU's environmental policy is grounded in **Articles 191–193** of the **Treaty on the Functioning of the European Union** (TFEU). These articles establish the EU's responsibility to preserve, protect, and improve the quality of the environment, ensure sustainable development, and promote international action on environmental challenges.

Key principles in EU environmental law include:

- **Precautionary principle:** Preventing environmental harm when scientific uncertainty exists.
- **Polluter-pays principle:** Those who pollute should bear the costs of environmental damage.
- **Sustainability:** Ensuring that economic growth does not come at the expense of environmental degradation.

While many of these frameworks establish obligations, enforcement largely remains a national responsibility. However, EU law mandates effective enforcement mechanisms with judicial oversight and public access to environmental information facilitated by the **European Environment Agency (EEA)**.

3.1. Overview of relevant directives and policies

Spatial planning works as a critical mechanism that integrates land use, environmental protection, and sustainable development. This system enables EU Member States (MS) to coordinate efforts to conserve natural landscapes, protect biodiversity, manage urban development, and mitigate the impacts of climate change.

Spatial planning frameworks vary across countries but are increasingly guided by **EU legislation** and regulations to ensure consistency and environmental safeguarding across the Union. Directives such as the SEA, EIA, and the Habitats Directive ensure that planning processes are environmentally sustainable and that land use decisions do not compromise biodiversity or ecosystem services.

Spatial planning in the EU falls under national competence but is heavily influenced by several EU directives and environmental policies. These legislative tools aim to harmonise Member States' planning efforts, especially in terms of cross-border environmental impacts.

3.1.1. European Spatial Development Perspective (ESDP)

The **ESDP** (1999) is a key non-binding policy document that introduced the concept of balanced and sustainable spatial development across the EU. Although not legally enforceable, it encourages MS to consider territorial cohesion, sustainable development, and environmental protection when planning. The ESDP aims to:

- Reduce territorial imbalances between urban and rural areas
- Promote environmentally sustainable urban development
- Encourage efficient resource use.

3.1.2. Territorial Agenda 2030

The **Territorial Agenda 2030**, adopted in December 2020, is an updated framework that builds on the ESDP. It highlights territorial cohesion and sustainable development, emphasising the importance of spatial planning in achieving the **European Green Deal** objectives. The document focuses on:

- Climate action through sustainable spatial development
- Resilient and inclusive regional planning
- Protecting ecosystems and biodiversity in land use decisions.

3.1.3. Strategic Environmental Assessment (SEA) Directive

The **SEA Directive** (Directive 2001/42/EC) requires environmental assessments for certain public plans and programmes, particularly in sectors like transport, energy, and agriculture. The assessments help integrate environmental considerations early in planning and decision-making processes. The directive ensures that environmental consequences are considered in the early stages of planning. It applies to public plans and programmes that may impact the environment, requiring assessments for sectors such as agriculture, forestry, fisheries, energy, transport, and urban development. The SEA process aims to:

- Integrate environmental objectives into spatial planning
- Evaluate the cumulative environmental effects of large-scale land use changes
- Ensure public participation and transparency in planning.

By doing so, the SEA Directive helps protect ecosystems from large-scale infrastructure projects or urban sprawl that could disrupt natural habitats.

3.1.4. Environmental Impact Assessment (EIA) Directive

The **EIA Directive** (Directive 2011/92/EU, as amended by 2014/52/EU) mandates assessments for projects likely to have significant environmental impacts before they receive approval. Examples include infrastructure projects like airports, highways, and energy facilities. Any project that may significantly affect the environment due to its size, nature, or location requires an EIA. The directive mandates:

- Rigorous assessment of environmental effects, including on biodiversity, air quality, and land use
- Stakeholder and public consultation
- Consideration of alternatives to reduce environmental impact

This ensures that significant developments, such as industrial sites or transportation infrastructure, do not proceed without comprehensive environmental assessments.

3.1.5. Habitats and Birds Directives

Spatial planning must also comply with the **Habitats Directive (92/43/EEC)** and the **Birds Directive (2009/147/EC)**, which form the cornerstone of the **Natura 2000** network. This network of protected areas spans across the EU and aims to safeguard habitats and species. Any spatial

plans affecting Natura 2000 sites require strict environmental assessment and mitigation measures to ensure that:

- Biodiversity is preserved
- Development does not compromise the ecological integrity of these sites
- Appropriate land-use practices are implemented in and around protected areas.

These directives ensure that spatial planning does not lead to the degradation of Europe's most valuable and vulnerable ecosystems.

3.1.6. Waste Management and Circular Economy

The **Waste Framework Directive** (Directive 2008/98/EC, as amended) establishes a waste hierarchy that prioritises waste prevention, reuse, recycling, and recovery before disposal. This framework is crucial for promoting the EU's circular economy goals, with a focus on resource efficiency and waste reduction. Additional sector-specific regulations like the **Waste from Electrical and Electronic Equipment** and the **End-of-Life Vehicles Directive** also shape waste management strategies in the EU. Notably, revisions to the **Waste Framework Directive** are being advanced to address pressing issues, such as textile and food waste.

3.1.7. Maritime and Marine Spatial Planning

Spatial planning in the EU is closely linked to environmental objectives. The **Maritime Spatial Planning Directive** (Directive 2014/89/EU) provides a framework for coordinated maritime space use, supporting sustainable maritime growth while ensuring environmental protection. It ensures that human activities at sea, such as shipping, fishing, and renewable energy development, are coordinated to reduce conflicts and protect marine ecosystems. This aligns with other environmental frameworks, such as the **Marine Strategy Framework Directive**, which promotes the sustainable use of marine resources.

3.1.8. Water and Air Quality Directives

The **Water Framework Directive** (Directive 2000/60/EC) sets out goals for achieving "good" status for all water bodies, addressing water quality and ecological health. Similarly, air quality is managed under the **Ambient Air Quality Directive** (Directive 2008/50/EC), which sets limits on pollutants to protect public health and the environment. The **Industrial Emissions Directive** continues to regulate emissions from large industrial facilities, reinforcing sustainable industrial practices.

3.1.9. Urban Planning

EU spatial policies promote compact urban development to avoid urban sprawl, which can lead to habitat fragmentation and increased carbon emissions. The **Urban Agenda for the EU** supports green infrastructure, nature-based solutions, and sustainable urban mobility. Cities are encouraged to develop green belts, maintain urban biodiversity, and reduce their environmental footprint.

3.1.10. Flood Risk Management and Spatial Planning

The **Floods Directive (2007/60/EC)** requires Member States to assess and manage flood risks, particularly in areas vulnerable to climate change. Spatial planning plays a role in flood risk management by regulating land use in flood-prone areas, promoting natural flood management solutions like restoring wetlands and avoiding construction in high-risk zones.

3.1.11. Cross-Border Cooperation in Spatial Planning

Spatial planning is not limited to national boundaries. The EU promotes cross-border cooperation, especially in regions where environmental issues transcend national borders. Instruments like the **Interreg Europe Programme** support joint planning initiatives between EU MS, focusing on:

- Cross-border environmental conservation
- Coordinated spatial planning in transnational regions, such as river basins
- Sharing best practices for sustainable land use and environmental protection.

3.1.12. Climate Change and Spatial Planning

With climate change becoming a central concern, spatial planning must address climate resilience and adaptation. The EU **Climate Adaptation Strategy (2021)** stresses the importance of incorporating climate risks into spatial planning. This includes:

- Resilience to extreme weather events such as floods and droughts
- Protecting coastal zones from sea-level rise
- Ensuring urban and rural planning that reduces greenhouse gas emissions and enhances carbon sinks, like forests and wetlands.

The **European Green Deal** (EGD) is the EU's flagship policy aimed at making Europe the first **climate-neutral continent by 2050**. It lays out a comprehensive strategy to address climate change, biodiversity loss, and environmental degradation while fostering economic growth. The EGD includes a strong emphasis on conserving biodiversity, halting ecosystem degradation, and restoring natural areas. For the context of **spatial planning and environmental protection**, the EGD ultimately shapes land use, infrastructure development, urban planning, and nature conservation across MS.

3.2. Natura 2000

Natura 2000 is the largest coordinated network of protected areas in the world, extending both on land and at sea across all 27 EU Member States. It plays a central role in the European Union's spatial planning framework, particularly in relation to environmental protection. The network aims to safeguard Europe's most valuable and threatened species and habitats, making a significant contribution to biodiversity preservation and sustainable land use.

Natura 2000 covers nearly 18% of the EU's terrestrial area and over 9% of its marine area. It consists of two types of protected sites:

- **Special Areas of Conservation:** Established under the **Habitats Directive (92/43/EEC)**, SACs protect various habitat types and species considered of European importance
- **Special Protection Areas:** Created under the **Birds Directive (2009/147/EC)**, SPAs focus on the conservation of endangered and migratory bird species.

Natura 2000 is not a strict nature reserve system where all human activities are excluded. Instead, the approach is integrated with the **sustainable management** of land and resources, balancing conservation needs with human activities such as agriculture, forestry, and tourism.

In this context, any spatial plan, programme, or project that may impact a Natura 2000 site must undergo rigorous environmental assessment procedures. These assessments ensure that:

- Any negative impacts on habitats and species are identified early
- Alternatives are explored, and mitigations or compensations are proposed
- Public participation and consultations with relevant stakeholders (local communities, environmental NGOs, etc.) are integrated into the planning process.

For example, urban development projects near Natura 2000 sites must demonstrate that they will not disrupt species' migration corridors or fragment key habitats. If significant negative impacts are identified, projects must be modified or abandoned. Although this **rule can be waived** for reasons of imperative societal considerations, the waiver requires an impact assessment of the project's impact on the area, with no alternatives, the implementation of compensatory measures, and notification to and acceptance by the European Commission of the intervention.

The **Habitats Directive** lays out specific obligations for protecting Natura 2000 sites within spatial planning:

- **Article 6(3)** requires that any plan or project within or near Natura 2000 sites and/or likely to have a significant effect on a Natura 2000 site undergoes an **Appropriate Assessment (AA)** to evaluate its implications for the conservation objectives of the site
- **Article 6(4)** allows for exceptions only if there are no alternative solutions, if the project is deemed necessary for "imperative reasons of overriding public interest", and if compensatory measures are provided to ensure the overall coherence of the network.

The **Strategic Environmental Assessment (SEA) Directive (2001/42/EC)** also mandates that public plans or programmes likely to impact Natura 2000 sites include environmental assessments.

The planning of **energy infrastructure development** is also significantly impacted by Natura 2000 barriers. Wind farms, transportation networks, and other energy infrastructure projects are subject to strict environmental scrutiny if they impact Natura 2000 sites. For instance, wind farms must be located away from bird migration paths to avoid collisions and must consider the impact on both birds and other protected species at risk, such as bats or amphibians.

3.3. The EU Biodiversity Strategy for 2030

The **EU Biodiversity Strategy for 2030** is a key component of the **European Green Deal**, aiming to halt biodiversity loss and ensure the protection and restoration of ecosystems. This ambitious strategy, published by the European Commission in May 2020, sets clear goals to expand the **Natura 2000 network** and improve the effectiveness of its conservation efforts.

One of the key objectives of the **EU Biodiversity Strategy for 2030** is to **expand the Natura 2000 network** and other protected areas. The EU aims to protect at least **30% of its land and 30% of its marine areas** by 2030, with one-third of these areas being under **strict protection**.

- **Strictly protected areas** include ecosystems such as old-growth forests, peatlands, wetlands, and seagrass beds, which are crucial for biodiversity and carbon storage
- The expansion emphasises not only designating new sites but also **connecting** them to form **a more cohesive ecological network**, enhancing species' ability to migrate and adapt to environmental changes such as climate change.

A significant component of the Biodiversity Strategy for 2030 is ensuring the **effective management** of Natura 2000 sites. The strategy acknowledges that while the Natura 2000 network covers a large area, not all sites are managed effectively to meet conservation goals.

- The **European Commission** will work with Member States to ensure that each site within the Natura 2000 network has detailed **management plans** that include specific conservation objectives and measures
- **Monitoring and enforcement** will be enhanced to ensure compliance with environmental legislation. This includes regular assessments of the conservation status of species and habitats, as well as the use of EU funds to enhance site management.

4. Legal Framework: Denmark

Denmark's spatial planning and environmental legislation are closely aligned with EU frameworks, including the **Green Deal**, **Natura 2000**, and the **Biodiversity Strategy for 2030**. The country's highly decentralised governance structure allows municipalities to play a critical role in implementing national and EU policies at the local level, while the central government sets overall guidelines.

Denmark has transposed part of the EU directives into national laws and policies that support sustainable development, nature conservation, and biodiversity protection. Denmark has been actively aligning its policies with the objectives laid out in the EU Biodiversity Strategy for 2030 by expanding its protected areas and implementing stricter conservation measures. The strategy focuses on restoring ecosystems, improving biodiversity governance, and promoting nature-based solutions in urban planning. This is embedded into Denmark's spatial planning framework, where local governments must consider biodiversity conservation when developing **municipal and local plans**. Denmark has fully implemented the EIA Directive (2011/92/EU) and SEA Directive (2001/42/EC), both integral components of the EU Green Deal.

4.1. Spatial Planning and Environment

Denmark's spatial planning system is governed by a hierarchy of laws, with the Planning Act (Planloven) being the cornerstone. The European directives concerning spatial and environmental planning have been transposed in the following acts:

- Environmental Assessment Act (*Miljøvurderingsloven*)
- Climate Act (*Klimaloven*)
- Nature Conservation Act (*Naturbeskyttelsesloven*)
- Hunting and Wildlife Management Act (*Jagt- og vildtforvaltningsloven*)
- Environmental Protection Act (*Miljøbeskyttelsesloven*)

In this section, each act is described in more detail and includes the possibility of compensating for nature in spatial planning.

4.1.1. Natura 2000

The Natura 2000 network is a significant component of Denmark's environmental strategy. The Danish government has designated a total of 250 Natura 2000 sites, spanning a considerable portion of land and marine areas (approximately 8% of land and over 16% of marine territory), for their protection due to the presence of endangered species or habitats. These areas are regulated under the Danish Environmental Protection Agency (*Miljøstyrelsen*), which enforces conservation measures and works on habitat restoration and species protection in line with EU regulations.

At the national level, Denmark's Ministry of Environment (*Miljøministeriet*) also oversees the implementation of environmental regulations, including Natura 2000 protections.

Municipalities, responsible for developing their municipal plans and local plans, must ensure that new projects consider biodiversity, climate resilience, and EU environmental directives.

- Protected species' and birds' habitats as well as breeding and resting areas are listed in Annex IV of the Habitats Directive. Prohibition against deliberate disturbance of, as well as damage and destruction of, species' breeding areas or resting places is set out in Section

3 of the Nature Conservation Act (*Naturbeskyttelsesloven*) and in the Hunting and Wildlife Management Act (*Jagt- og vildtforvaltningsloven*)

- As part of the Natura 2000 network, Denmark also includes the so-called Ramsar areas. Ramsar sites are wetlands with so many waterfowl that they are of international importance and must be protected. All the Danish Ramsar sites are part of the bird protection areas and are therefore also part of the Natura 2000 network.

Denmark has set up Natura 2000 committees in various regions, involving stakeholders from municipalities, landowners, environmental groups, and other interested parties. These committees provide input on how Natura 2000 sites are managed and help ensure local buy-in for the protection measures.

Denmark's Natura 2000 Action Plans involve detailed management of these protected areas, with a focus on mitigating environmental pressures, such as pollution, invasive species, and urbanisation. Denmark integrates these plans into its municipal planning system, requiring local governments to align their spatial planning with Natura 2000 objectives to safeguard biodiversity.

Possibilities for compensation measures

Under the Danish Nature Package Agreement, it was established that natural areas can pose obstacles to project development for businesses and public authorities. A room was created to explore possible compensation measures for projects developed in or near natural areas.⁴³ Subsequently, in September 2018, a report from DCE, Aarhus University, was published highlighting the possibilities for creating replacement nature in relation to habitats and species.

The main conclusions of the report with regard to Natura 2000 are as follows:

- Under the Habitats Directive, there are certain possibilities to derogate from the protection of Natura 2000 sites. This presupposes that there must be imperative reasons of overriding public interest and that there are no alternative solutions. Necessary compensatory measures must be taken to ensure the coherence of the Natura 2000 network is preserved (Art. 4(4) of the Habitats Directive).
- Protective measures for developing projects in Natura 2000 areas have been clarified by the European Court of Justice. Replacement nature, intended to compensate for negative impacts on the Natura 2000 area, can only be included if it is made as part of a derogation from the Habitats Directive. If all the conditions are met for derogating from the protection of Natura 2000 sites, then replacement nature is possible as a compensatory measure.⁴⁴
- The protection of Annex IV species and birds does not in itself prevent work on establishing replacement nature. However, it is a prerequisite that areas that are to be used for other purposes are examined for the presence of Annex IV species, and that an assessment is made of whether the ecological functionality of occurrences of Annex IV species can be maintained. The classification of replacement nature is considered a remedial measure that can help to maintain the ecological functionality. It is a requirement under the Habitats Directive that the replacement nature is established

⁴³ <https://mst.dk/erhverv/rig-natur/naturbeskyttelse/3-beskyttede-naturtyper/etablering-af-erstatningsnatur>

⁴⁴ Case C-521/12 TC Briels and Others

before the existing nature is destroyed, and there must be a high degree of certainty that the replacement nature works to a sufficient extent not to affect the population of the species in question.⁴⁵

4.1.2. The Planning Act (Planloven)

The Danish Planning Act, enacted in 1992 and subsequently revised, governs spatial planning across Denmark. This law establishes a framework for municipal, regional, and national planning, guiding sustainable land use while safeguarding the environment. It divides the country into three zones: urban, rural, and summer home areas. It establishes clear zoning boundaries to protect rural and natural areas from urban sprawl.

With the Planning Act, a local government reform reinforced municipal responsibility for spatial planning. The central government retained oversight of national priorities and frameworks. In consequence, Denmark's regions and municipalities play an even more crucial role in implementing EU legislation.

Plans are developed at three levels:

- National plans: the Minister for Cities and Rural Districts (*Ministeren for byer og landdistrikter*) provides the national framework for planning in Denmark
- Municipal plans: local authorities provide priorities and guidelines for regional and municipal land-use and development for a period of 12 years (Chapter 4 Planning Act)
- Local plans: local authorities provide concrete plans for land use in their municipality (Chapter 5 Planning Act).

When developing a project, the planned initiative should fit within the framework of the municipal and local plans of the municipality. An important distinction between a municipal plan and a local plan is that a local plan is binding, whereas a municipal plan is not. Citizens cannot always count on the municipal plan to be implemented, and it is at one's own risk to invest in accordance with the municipal plan.

The Planning Act mandates local authorities to include in their municipal plans certain guidelines ensuring the protection of natural areas with special nature protection interests (including Natura 2000 land and other protected areas), as well as guidelines accordingly regulating the location of impact areas around technical facilities, wind turbines, etc. (§11a Planning Act).

In April 2023, the Planning Act was amended to enable planning for wind turbines and solar installations in maritime and industrial landscapes, ensuring a clear and streamlined framework for renewable energy projects at the national level (§11b, paragraph 5, Planning Act).

4.1.3. Environmental Assessment Act (Miljøvurderingsloven)

The Planning Act emphasises the importance of environmental impact assessments and coastal protection. The Environmental Assessment Act further regulates this matter. The purpose of this act is to ensure a high level of protection and contribute to the integration of environmental

⁴⁵ <https://mst.dk/media/d1ljilet/resume-af-faglig-udredning-om-erstatningsnatur.pdf>

considerations during the preparation and adoption of plans and programs, as well as when permitting projects.

The Environmental Assessment Act (EIA Act) implements the EIA Directive into Danish law. Projects listed in Appendix 1 and Appendix 2 of the EIA Act are subject to an environmental impact assessment and a written permission by the EIA authority to start the project (§15 EIA Act). Projects under Appendix 2 of the EIA Act may only be initiated if the EIA authority has assessed that the project does not have a significant impact on the environment on the basis of a screening (§16 EIA Act). The EIA authority is the municipality for projects on land and the Minister of the Environment for projects in the marine area (§17 EIA Act).

Mitigation measures in the EIA report

The EIA procedure requires the preparation of an account detailing the construction project's expected significant environmental impacts. The report is mandatory and is subject to public consultation before the developer can be granted permission to start the project. In addition to clarifying the environmental consequences of a project, the EIA process may also involve examining alternatives or changes to the client's project. It will depend on a specific assessment in the individual case to what extent conditions should be imposed for compensation measures. In [2.5](#) of this report, the secretariat provides examples of compensation measures for wind turbine parks and solar parks in Denmark.

4.1.4. Nature Conservation Act (Naturbeskyttelsesloven)

The Nature Conservation Act works in tandem with EU directives to ensure the legal protection of natural habitats. The Nature Conservation Act also governs building permits and environmental reviews, ensuring any new development complies with sustainability goals. Local authorities play a critical role in enforcing these protections through spatial planning and issuing permits that must consider impacts on Natura 2000 sites.

Section 3 of the Nature Conservation Act stipulates which nature types are protected, including lakes over 100 m², designated watercourses, as well as heaths, bogs, salt marshes, fresh meadows and biological grasslands. The protected areas are typically registered in the Danish Environmental Portal (*Danmarks Miljøportal*). Approximately 10% of Denmark's territory comprises natural areas designated as such under Section 3 of the Nature Conservation Act. A large proportion of the protected natural areas (51%) are located within other designated and protected areas, including Natura 2000 areas, in protected areas, on state-owned areas (the Danish Nature Agency and the Danish Armed Forces), in national parks or in nature and wildlife reserves.⁴⁶ The protection of the habitat types means that no changes may be made to the condition of the protected areas, e.g. in the form of interventions such as planting, cultivation, excavation, etc.

No buildings, planting or changes to the terrain may be made to protected dune areas (§8 Nature Conservation Act). Additionally, no changes may be made on the shoreline and coastal protected areas (§15 Nature Conservation Act). The dune protected areas span 300 metres from the coast

⁴⁶ <https://mst.dk/media/d1ljilet/resume-af-faglig-udredning-om-erstatningsnatur.pdf>

and in urban areas typically 100 metres or less from the coast.⁴⁷ The coastal protection line spans 300 metres from the water's edge, and 100 metres in summer house areas.⁴⁸

The Nature Conservation Act has several habitat protection schemes with different responsible authorities. For instance, the nature management schemes (§55), the general nature type protection (§3), or the general protection of habitats of EU-protected species (§29a).

Possibilities for compensation measures

The municipalities are the authorities for their natural areas. In special cases, municipalities may grant exemptions from the protection provisions. Decisions on this can be appealed to the Environment and Food Complaints Board (*Miljø- og Fødevareklagenævnets afgørelse*) (§44 Nature Conservation Act).

The main conclusions in the report from DCE, Aarhus University, on the possibilities for creating replacement nature with regards to the Nature Conservation Act are as follows:

- In the explanatory notes to the Nature Conservation Act, it is stated that in certain cases it may be well-founded to require the establishment of a replacement nature as a condition for exemptions where there is a prior application. Restraint should be exercised in this regard, as, from a nature conservation point of view, it would normally be far preferable that the original natural areas, with their distinctive characteristics and associated animal and plant life, are retained to the greatest extent possible. The establishment of a compensation nature is not in itself considered to be a special case that alone can justify an exemption. According to the rules, an exemption that includes the construction of a replacement of natural conditions must always be based on a specific assessment of the natural conditions and the consequences of the applied intervention for the state of nature.
- If, due to important social considerations, e.g. in connection with the construction of infrastructure or institutional buildings, it is necessary to grant exemptions for significant interventions in protected natural areas, it is normally a prerequisite that conditions are laid down for the establishment of replacement nature and subsequent nature conservation. Likewise, conditions regarding replacement nature are often included if a natural area has been wrongfully abandoned. In practice, the replacement area is registered on the property in question because it will take several years for the area to develop a condition corresponding to a protected natural area.

4.1.5. Coastal Protection Act (Kystbeskyttelsesloven)

The Coastal Protection Act regulates coastal protection and other types of terrain changes along the coast. Municipalities must ensure that the measures in the act are adhered to, and landowners are responsible for protecting their own property.

⁴⁷ <https://kyst.dk/kystzonen/klitfredning>

⁴⁸ <https://kyst.dk/kystzonen/strandbeskyttelse/strandbeskyttelseslinjen>

4.1.6. Hunting and Wildlife Management Act (Jagt- og vildtforvaltningsloven)

The Hunting and Wildlife Management Act regulates hunting, wildlife conservation, and management of wild species in Denmark. The primary objectives of this law are to protect biodiversity, ensure the sustainable management of wildlife populations, and regulate hunting activities to promote ecological balance and conservation goals.

With regards to wildlife conservation and biodiversity, the act ensures that wildlife populations are maintained at sustainable levels, promoting balanced ecosystems. Certain species may be given special protection under the law to prevent them from becoming endangered or extinct (§1 and §12 Hunting and Wildlife Management Act).

The Minister of the Environment and Food (*Miljø- og fødevareministeren*) is responsible for monitoring wildlife populations and habitats, as well as implementing conservation measures (§9a Hunting and Wildlife Management Act).

Possibilities for compensation measures

The Species Conservation Order⁴⁹ provides protection for species under the Birds Directive and the Habitats Directive, as well as for species that are nationally rare and endangered, including those covered by the Bern Convention. The protection of protected species does not, in itself, prevent work on establishing replacement habitats. In the case of more frequently occurring species and individuals that, according to the Danish Environmental Protection Agency's assessment, could be moved to a nearby natural area, the Danish Environmental Protection Agency may grant exemptions from the prohibitions in the Species Conservation Order on conditions such as relocation of the individuals before the destruction of the habitat.

4.1.7. Environmental Protection Act (Miljøbeskyttelsesloven)

The Environmental Protection Act aims to protect the environment, human health, and promote sustainable development. It provides a legal framework for preventing and controlling pollution, managing waste, and safeguarding natural resources.

The act includes measures and competence of the Minister for the Environment (*Miljøministeren*) to protect ecosystems and natural resources, such as water bodies, soil, and wildlife habitats, ensuring they are used sustainably (§7 Environmental Protection Act).

4.1.8. Marine Protected Areas

Denmark's **marine Natura 2000 sites** play a critical role in the country's conservation efforts, particularly for marine species such as the harbour porpoise and seals. The **Marine Strategy Framework Directive (2008/56/EC)** is implemented through Denmark's **Marine Action Plan**, which establishes conservation measures for these areas and restricts certain activities, such as fishing, to minimise human impact on marine ecosystems.

⁴⁹ Executive Order no. 867 of 27 June 2016 on the conservation of certain animal and plant species and the care of injured game has been issued pursuant to both the Nature Conservation Act and the Hunting and Wildlife Management Act.

4.2. Energy Transition

In June 2024, Denmark finalised its **National Energy and Climate Plan (NECP) for 2021-2030**. Denmark aims to quadruple its land-based renewable energy production by 2030, from approximately 12 to 50 billion kilowatt-hours annually. This increment will require up to 1.3% of Denmark's land area, compared to the 0.5% occupied today.⁵⁰

Central to this effort are the **2022 Climate Agreement on Green Power and Heat** and the **2023 Climate Agreement on Greener Energy from Sun and Wind on Land**. These agreements were designed to balance Denmark's ambitious green transition with economic growth and emphasise that Denmark's green power expansion beyond its domestic needs should be free of subsidies. The 2022 Agreement helped to define the **active role of the State** in planning large-scale energy parks, focusing on removing planning barriers and providing complementary support to municipal projects. Then, the Agreement on Greener Energy further strengthened the State's involvement in planning large energy parks and raised local community compensation through the Renewable Energy Sources (RES) bonus and Green Pool schemes, to build acceptance of these projects.

For offshore wind, Denmark aims to offer 4 GW of capacity by 2030, with a total potential reaching 19 GW if market interest supports it, including the **Bornholm energy island** and other projects. Denmark is also working toward establishing an **energy island in the North Sea**, with a long-term goal of 10 GW of offshore wind capacity. These projects will support domestic use, European exports, and **Power-to-X** technologies to produce sustainable fuels for transportation.

A **Supplementary Agreement (2023)** outlined procurement frameworks for 6 GW of offshore wind, introduced state co-ownership of wind farms, and set new sustainability and social responsibility requirements. This agreement also established a **Marine Nature Fund** to mitigate the environmental impacts of offshore projects and support marine biodiversity restoration.

Lastly, other initiatives have been introduced to **strengthen local engagement** and expedite the deployment of onshore RE. This includes the establishment of a renewable energy task force to share best practices with municipalities, as well as increased funding for compensating local communities affected by nearby wind turbines and solar installations. Denmark also established the **National Energy Crisis Loss (NEKST) initiative** to accelerate the green transition. NEKST is aimed at addressing key challenges and expediting the deployment of solar and wind energy. Working Groups also tackle local support, speeding up administrative processes, improving coordination between authorities, and optimising land use for renewable energy installations.

4.2.1. Renewable Energy Policies

The 2022 Climate Agreement on Green Power and Heat and the 2023 Climate Agreement on Greener Energy from Sun and Wind on Land have been key to advancing the deployment of renewable energy. Importantly, these agreements provide more favourable conditions for energy parks in larger contiguous areas where solar and wind energy can be developed. As a result, additional greenfield sites are obtaining authorisations to site new energy parks.

⁵⁰ https://ens.dk/sites/ens.dk/files/EnergiKlimapolitik/udkast_til_ajourfoering_af_danmarks_nationale_energi-_og_klimaplan.pdf

This recent scheme finds its justification in the **difficult and extensive permitting process** currently applicable to new energy project deployment. To this end, certain land protection considerations are relaxed, in exchange for an easier and faster permitting process, albeit limited to proposals from municipalities and companies.

The greenfield in question consists mainly of forest construction line areas, and coastal zones to a lesser extent. The former bans the construction of buildings on land spanning from the edge of a forest up to 300 m inland, while the latter also mandates what can be built from the water's edge and 3 km inland. Nevertheless, areas containing **vulnerable and unique nature are not subject** to this exception, as well as highly valuable nature as defined by Section 3 of the Nature Conservation Act.

This laxer framework **cannot be applied in a general manner**. In fact, only selected projects can rely upon it. The selection process commences with Danish municipalities and companies submitting proposals for areas deemed suitable for the parks. Following municipal dialogues and environmental suitability assessments, a small number of project areas are designated.

After the designation of an area for an energy park, the local actors (i.e., municipalities, renewable energy installers and landowners) are responsible for utilising the framework to develop concrete projects. As of this moment, two calls have already been launched, with a total of 17 prospective onshore energy parks. This process is foreseen to recur in 2024 and 2025.

4.2.2. Renewable Energy Act (Lov om fremme af vedvarende energi)

The Renewable Energy Act aims to promote the production of energy using renewable energy sources, in accordance with climate and environmental as well as socio-economic considerations, with a view to reducing dependence on fossil fuels, ensuring security of supply, and reducing the emission of CO₂ and other greenhouse gases.

Possibilities for compensation measures

Specifically with regards to spatial planning, the Renewable Energy Act offers schemes for compensating local citizens affected by renewable energy projects:

- Loss of value and sale option: the installer must pay for loss of value on a residential property, equal to the amount of the loss of value as a result of the construction of the renewable energy installation (§6 Renewable Energy Act).
- Renewable energy bonus scheme: the installers must pay an annual bonus to neighbours of the renewable energy installation within 200 metres of the project (§13 Renewable Energy Act).
- Green pool: the installer must pay a lump sum per MW to the municipality where the plant is built, and the compensation is used for municipal activities and local projects (§14 Renewable Energy Act).

4.2.3. Climate Act (Klimaloven)

The Danish **Climate Act (2020)** laid the basis for the expansion of renewables, focusing on large-scale renewable energy production. The country has subsequently worked on plans for significant expansions in offshore wind capacity, including a political agreement that establishes a framework for the largest expansion of marine wind power in Denmark.

5. Support Schemes

According to Denmark's NECP for 2021-2030, State funding for green research and development is available through several schemes, including the Danish [Innovation Fund](#) and the Danish Free Research Fund, in addition to 3 development and demonstration programmes:

- Energy Technology Enlargement and Demonstration Programme ([EUDP](#))
- Environmental Technology Development and Demonstration Programme ([MUDP](#))
- Green Enlargement and Demonstration Programme ([GUDP](#)).

[Green bonds](#) issued and managed by Danmarks Nationalbank form part of the overall funding of the Kingdom of Denmark green funding schemes, including subsidies for renewable energy.

5.1. Renewable energy

Invest in Struer-Falster offers free, confidential support for the establishment and expansion of businesses including renewable energy projects. There is no specific application form, but they can be contacted for an orientation meeting.⁵¹

The [Danish Energy Agency](#) provides an overview of support available for renewable energy projects. Support in the form of tenders or auctions for new onshore wind capacity and the technology is no longer being offered. However, investment aid schemes are still available for [experimental wind turbines](#).

In addition to the abovementioned compensation schemes under the Renewable Energy Act,⁵² the [Guarantee Fund](#) provides a guarantee to local communities for the financing of feasibility studies etc. in relation to the installation of wind turbines or solar PV.

Installers of renewable energy plants can also get the necessary costs compensated in connection with grid connection of the generation plants via the [Compensation Scheme](#) of the Danish Energy Agency.

Via the Danish Energy Agency, it is also possible to obtain a reimbursement, approved at a [fixed transfer price](#), for surplus production sold on the electricity market.

5.2. Environmental impact assessment

To assist authorities and supporters with the environmental assessment process, the [EA Hub](#) and EA Tools have been developed. EA Hub offers an interactive selection of Danish environmental impact reports, where search tools and GIStools can be (jointly) used on the material. EA-Tools compile and systematise environmental data from more than 300 different databases in parameters relevant to the assessment.

Further specific support is something made available in the form of grants by the Danish Nature Agency. Although there currently are not specific grants available, it is worth keeping an eye out on their website.

⁵¹ <https://investinlf.com/about-us/>

⁵² See also section 1.4 of this report.

In the next steps of this trajectory, the Clean energy for EU islands secretariat will help the island transition team to find financial support for further advisory services and reporting on environmental impacts assessments.