

Sixth Danish Country Report

Convention on Biological Diversity

January 2019

Publisher: Ministry of Environment and Food of Denmark

Introductory notes to the 6th Country Report

The 6th Danish Country Report differs from the most recent 5th Country Report from 2014 in that it focuses on updating initiatives described in the 5th Country Report and refers to materials previously prepared. The 6th Country Report should therefore be seen in the context of the 5th Country Report so that, jointly, the reports provide an overall picture of the state of nature and the initiatives taken to enhance biodiversity in Denmark. Note that the country profile for Denmark, including a brief overview of the state of nature and the initiatives implemented, is in a separate annex, as the country profile will appear separately on the Convention on Biological Diversity website.

Denmark's most recent report to the EU on the state of nature was in 2013. An update on the state of nature will be provided in 2019, which is the time planned for Denmark's next reporting to the EU on the status of species and habitat types covered by the Birds and Habitats Directives. Furthermore, the Danish government plans to publish a new environmental status report in 2019. The National Monitoring and Assessment Programme for the Aquatic and Terrestrial Environments (NOVANA) provides data on water and nature in Denmark, and collaborates amongst others with the Danish Ornithological Society - BirdLife Denmark, which collects data on populations of birds in Denmark.

The 6th Country Report has been adapted to a Danish and a European context. Along with the other EU Member States, Denmark has joined the EU Biodiversity Strategy, a common European contribution to meet the UN global targets on biodiversity. The EU Biodiversity Strategy overall aims to stop biodiversity loss by 2020, and sets six targets towards achieving this goal. On this basis, in 2014, the European Commission prepared a 5th Country Report for the EU to the UN, and the European Commission also prepares a 6th Country Report for the EU to the UN.

Denmark's primary contribution to implementing the UN Strategic Plan for Biodiversity is through the EU Biodiversity Strategy. Consequently, Denmark does not prepare national statements on progress in meeting the individual Aichi Targets. In addition, Denmark's national biodiversity strategy is being revised. Consequently, at present, no targets have been established at national level in a revised national biodiversity strategy. Sections I–III of the enclosed template has therefore been completed in more general terms than proposed in the general guidelines. Section IV is an update of the initiatives described in Chapter 3 of the 5th Country Report, as contributions towards achieving the individual Aichi Targets. The descriptions of initiatives focus on an update of the initiatives launched after 2014 and should therefore be read in the context of the descriptions in the 5th Country Report for an overall picture of initiatives taken since Denmark joined the UN Strategic Plan in 2010.

In 2019, the Danish government will set new ambitious goals for nature. In continuation of this, the government expects to prepare a new national biodiversity strategy. I.

 $\sqrt{}$

Information on the targets being pursued at the national level

My country has adopted national biodiversity targets or equivalent commitments in line with the Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets

Explanatory text

This box has been ticked as Denmark, along with the other EU Member States, has joined the EU Biodiversity Strategy. The EU Biodiversity Strategy overall aims to stop biodiversity loss in the EU by 2020, and sets six targets towards achieving this goal. The targets of the EU Biodiversity Strategy have been set at European level and determine how the EU Member States will jointly contribute to achieving the global targets in the UN Strategic Plan. As a supplement to the EU Biodiversity Strategy, many important nature initiatives have been launched in Denmark, and these will also contribute to achieving the Aichi Targets.

In 2014, the former Danish government published a Danish Nature Policy ("Naturplan Danmark"), and this was submitted to the secretariat for the UN Convention on Biological Diversity in 2015 as Denmark's national biodiversity strategy. The Danish Nature Policy does not include national targets. Instead, it identifies a number of focus areas.

A new government was formed in Denmark in 2015. The Agreement on the Nature Package from May 2016 between the government and a majority of the political parties in the Danish Parliament (Denmark's Liberal Party, the Danish People's Party, the Conservative People's Party and Liberal Alliance) maintains some of the elements of the Danish Nature Policy, and also sets a new framework for improving nature and biodiversity. After adopting the Agreement on the Nature Package, the Ministry of Environment and Food informed the secretariat of the UN Convention on Biological Diversity that the national biodiversity strategy submitted is being revised. A revised national biodiversity strategy is expected to be published in 2019.

The Danish government will give priority to measures to stop the decline in biodiversity and has launched a number of initiatives to meet the 20 Aichi Targets, including the Agreement on the Nature Package from May 2016, the Natura 2000 plans from April 2016, the River Basin Management Plans from June 2016 and a new national forest programme in 2018. These initiatives will be described in more detail in section IV.

There is more information on these websites:

- The EU Biodiversity Strategy 2011: <u>https://eur-lex.europa.eu/legal-</u> content/EN/TXT/PDF/?uri=CELEX:52011DC0244&from=EN
- Danmarks havstrategi (the Danish Marine Strategy) 2012: <u>https://mst.dk/natur-vand/vandmiljoe/havet/havmiljoe/danmarks-havstrategi/</u>
- Danmarks havstrategis indsatsprogram (Marine Strategy, Program of Measures) 2017: https://mst.dk/natur-vand/vandmiljoe/havet/havmiljoe/danmarks-havstrategi/indsatsprogram/
- Danish Nature Policy (being revised) 2014: <u>https://eng.mst.dk/media/189227/naturplan-danmark-paa-engelsk.pdf</u>
- Aftale om Fødevare- og Landbrugspakke (Agreement on the Food and Agriculture Package) 2015: <u>http://mfvm.dk/fileadmin/user_upload/FVM.dk/Dokumenter/Landbrug/Indsatser/Foedevare-</u>
- og landbrugspakke/Aftale om foedevare- og landbrugspakken.pdf
- Aftale om Naturpakke (Agreement on the Nature Package) May 2016: https://mfvm.dk/fileadmin/user_upload/Natturpakke-2016.pdf
- Natura 2000 planerne (Natura 2000 plans) 2016: <u>https://mst.dk/natur-vand/natur/natura-2000-planer/natura-2000-planer-2016-21/</u>
- Vandområdeplanerne (River Basin Management Plans) 2016: <u>https://mst.dk/natur-vand/vandmiljoe/vandomraadeplaner/vandomraadeplaner-2015-2021/vandomraadeplaner-2015-2021/</u>
- Danmarks nationale skovprogram (the Danish national forest programme) 2018: <u>https://mfvm.dk/fileadmin/user_upload/MFVM/Nyheder/Danmarks_nationale_skovprogram_201_8.pdf</u>

Section II: Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Using the template below, please report on the major measures your country has taken to implement its national biodiversity strategy and action plan. Please also provide an assessment of the effectiveness of these measures. The template should be replicated for each measure reported.

II. Implementation measures taken, assessment of their effectiveness, associated obstacles and scientific and technical needs to achieve national targets

Describe a measure taken to contribute to the implementation of your country's national biodiversity strategy and action plan

Denmark has taken various measures that contribute to complying with the agreements and implementing the plans and programmes forming the basis for nature initiatives.

- In Denmark, initiatives aimed at species are generally based on improving the natural areas serving as habitats for several vulnerable and endangered species, and are not specific initiatives targeting individual species. In addition to this, more specific measures, targeting specific species such as particularly endangered species, have been implemented.
- Pursuant to the Agreement on the Food and Agriculture Package, the Agreement on the Nature Package, the Natura 2000 plans, the River Basin Management Plans and the Danish Marine Strategy, a number of nature restoration initiatives for forests, the countryside and the sea are being implemented. These include more natural hydrology in forests and open natural areas, establishing new forests, more interconnected natural areas, restoration of lakes and watercourses, and establishment of new stone reefs. Furthermore, there are comprehensive efforts to reduce discharges of nutrients into the aquatic environment.
- Nature-rich areas on land are protected amongst others by designating forest areas as untouched forest and other biodiversity forest, and marine areas are protected by designating them as vulnerable habitats and by introducing fisheries regulation. This protection supplements protection of natural areas laid down by legislation, conservation regulations, etc.
- Furthermore, many existing natural areas are managed through grazing, hay-making, burning, controlling invasive species, etc. For example, under the Danish Rural Development Programme, almost DKK 200 million has been allocated annually up to 2020 as funding for managing grazing and natural areas. Many open natural areas still call for enhanced conservation initiatives to ensure that the quality of nature in these areas is maintained and improved.
- It can be difficult to assess the effect on the development of species and habitat types of specific
 nature improvement initiatives, because the full effect is not evident until several years later, and
 because many different factors influence developments. The general state of nature and the aquatic environment is monitored through the National Monitoring and Assessment Programme for the
 Aquatic and Terrestrial Environments (NOVANA) and the data collected is included as part of the
 basis for setting targets and planning initiatives in the six-year Natura 2000 plans and River Basin
 Management Plans.
- The municipalities are responsible for designating areas for the Green Map of Denmark before the next revision of municipal development plans. The Green Map of Denmark aims to enhance efforts to establish larger and more interconnected natural areas. After completing the designation of areas, the Green Map of Denmark will serve as a strategic planning and prioritisation tool for local and central government, associations and foundations in future nature initiatives.
- People in Denmark should be able to enjoy rich and diverse nature. This will promote their understanding of the value of nature. Danes have access to large natural areas, such as forests and un-

cultivated land, and not least to the coasts and state-owned natural areas. Furthermore, the public has access to roads and paths in the countryside, on both privately and publicly owned land, giving people the opportunity to experience nature. Moreover, recreational facilities such as walking and cycling trails, bird towers and shelters are constantly being developed and improved.

Section III. Assessment of progress towards each national target

Using the template below, please assess the level of progress made towards each of your country's national targets or similar commitments. The template should be replicated for each national target. If your country has not set national targets please use the Aichi Biodiversity Targets.

III. Assessment of progress towards each national target

Target

Denmark's current national biodiversity strategy, "Danish Nature Policy", is being revised. Implementation of measures to enhance nature and biodiversity as described in the Agreement on the Food and Agriculture Package ("*Aftale om Fødevare- og Landbrugspakke*"), the Agreement on the Nature Package ("*Aftale om Naturpakke"*), the Natura 2000 plans 2016-2021, the River Basin Management Plans 2015-2021, the Danish Marine Strategy and the Danish national forest programme is proceeding as planned.

Section IV. Description of the national contribution to the achievement of each global Aichi Biodiversity Target

IV. Description of national contribution to the achievement of each global Aichi Biodiversity Target

Aichi Biodiversity Target 1, 2, 3...

Please describe how and to what extent your country has contributed to the achievement of this Aichi Biodiversity Target and summarize the evidence used to support this description:

The 5th Danish Country Report from March 2014 provides a presentation of important initiatives which support the achievement of each Aichi Target. The account below supplements the previous report, with an update of the most important initiatives since publication of the 5th country report in 2014.

Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably

- Tree-of-life app: The Danish Nature Agency has developed a "tree-of-life app" allowing citizens to suggest which trees in state-owned areas should be left to die naturally and decay. The trees will be protected and allowed to grow very old before they die and fall to the forest floor. Trees of life covered by this initiative are home to rich flora and fauna and contribute to a variety of species in Danish forests, including rare and endangered species. The goal is to designate up to five trees per hectare. This means that, over a number of years, a total of up to 500,000 trees of life will be designated and marked in state-owned areas. Teaching programmes have been conducted, e.g. for scouts who act as local ambassadors throughout Denmark in connection with designating trees.
- Nature awareness guidance: The Danish Nature Agency is organising nature awareness guidance events throughout Denmark to stimulate public interest and enhance people's understanding of nature. These events and initiatives include excursions for schools, associations, teaching at nature schools and schools, mushroom-gathering expeditions, bird-watching tours, etc. Moreover, the Danish Nature Agency participates at the annual nature summit ("*Naturmødet*") in Hirtshals, the Forest Day ("*Skovens Dag*") and at other events where people gather to discuss nature and biodiversity. In August 2018, the "Know your country" ("*Kend dit land*") pilot project was launched. The aim of this project is to take Danish 4th-grade school pupils on bus trips around Denmark to teach them about the rich nature, culture and history of Denmark.
- Use of media: Danish Nature Agency are frequently in national and local media, and the Agency issues press releases and writes stories for the Agency's website etc. when there is exciting news about biodiversity. Furthermore, the Danish Nature Agency communicates to Danes and with Danes on social media (Instagram, Twitter and Facebook), and reports in trade journals etc. on the Agency's own nature-related measures in state-owned areas in Denmark.
- The Danish nature canon: The Danish government has decided to update the Danish nature canon from 2009, with focus on encouraging Danes to use and experience nature. The nature canon consists of 15 nature sites throughout Denmark.
- The European Commission has several times measured people's knowledge and attitudes with regard to biodiversity. See the results of one such measurement from 2013 here: <u>http://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_379_fact_dk_en.pdf</u>

Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems

- Green Map of Denmark: Amendments to the Planning Act in 2015 and 2017 introduced a requirement that, in connection with the next revision of municipal plans, the municipalities must plan and designate existing and potential natural areas and wildlife corridors in a Green Map of Denmark. The Green Map of Denmark will reinforce efforts to establish larger and more interconnected natural areas, and it will serve as a strategic planning and prioritisation tool for local and central government, associations and foundations as the basis for future nature initiatives. When planning the Green Map of Denmark, digital nature maps, including a map of biodiversity showing the most important habitats for endangered and vulnerable species and other indicators for biodiversity must be used. Furthermore coherence with designations in neighbouring municipalities must be ensured. In 2018, 20 local nature councils were established with representatives from businesses as well as environmental organisations. The councils have been working across municipalities to help the municipalities designate areas for the Green Map of Denmark.
- Natura 2000 planning: In April 2016, Denmark updated its 252 Natura 2000 plans, and, for all the Natura 2000 sites, management measures have been decided and financed for the period 2016-2021. The Natura 2000 sites have been designated in order to protect a range of endangered, rare or characteristic species and natural habitats, and therefore, they cover some of the largest and most vulnerable natural areas in Denmark. The plans implement the EU Habitats and Birds Directives.
- In the Agreement on the Nature Package, it was decided to adjust the Natura 2000 boundaries. During this process, Denmark decided to include approx. 31,000 hectares of new areas in the Danish Natura 2000 area. This additional protection will benefit amongst others forests, meadows, freshwater marshes, grasslands and dry sand heaths. Furthermore, it has been decided to exclude areas that are not natural. Consequently, areas of approx. 30,000 hectares of cornfields, slurry tanks and piers have been excluded. Final approval of the adjusted Natura 2000 boundaries is awaiting approval from the European Commission.
- Green National Accounts: In 2015-2017, Statistics Denmark prepared Green National Accounts for Denmark. The Green National Accounts have been prepared in accordance with internationally recognised guidelines and standards developed by the UN and other international organisations. Green National Accounts are an extension to the traditional national accounts and they include the environmental impact of the economy and the use of resources, as well as economic activities linked to the environment. For example, the National Green Accounts include statements of land use and forests. This makes it possible to analyse how economic activities impact the environment and nature, and vice versa. The Green National Accounts do not include biodiversity as a parameter, but they include aspects that may form part of a description of biodiversity in Denmark.
- Ecosystem services: Denmark has carried out a number of research and development projects to map ecosystems and assess and value ecosystem services. As a result, the Danish ecosystems were mapped in 2014. In 2015, the knowledge currently available in Denmark about 16 ecosystem services was described, and these services were valued. Preliminary results of this work were published in 2015 in the report: "*Status for kortlægning af økosystemer, økosystemtjenester og deres værdier i Danmark*" ("Status of mapping of ecosystems, ecosystem services and their values in Denmark"). As a continuation of this work, an analysis tool has been developed to illustrate the interaction between ecosystem services in connection with changes in land use. The tool has been tested in a geographically-defined area covering 1/5 of the total area of Denmark. The result of this analysis was published in June 2017. The work has also resulted in development of a MAES-DK model, which has been tested on model assumptions and data and has contributed

to ensuring robust empirical estimates of ecosystem services in a Danish context.

 Denmark will contribute financially to the Global Environmental Facility (GEF) with around DKK 450 million (EUR 60 million) in the period 2018-2022. GEF is the formal funding mechanism for a number of Rio Conventions, including the Convention on Biological Diversity. Biodiversity is the primary action area of GEF, and focus is on supporting developing countries and middle-income countries financially to implement the objectives of the Convention on Biological Diversity. More specifically, GEF supports activities concerning integration of biological diversity into sectors and planning processes.

Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions

- A range of state subsidy schemes contribute to promoting nature and the environment, for example through implementation of the Danish Rural Development Programme, implementation of funding schemes under the Common Fisheries Policy (EMFF) and purely national funding schemes.
- Natura 2000 planning: In April 2016, Denmark updated its 252 Natura 2000 plans, so that, for all the sites, management measures have been decided and financed for the period 2016-2021. In connection with Natura 2000 planning, funding schemes have been introduced targeted at the nature management that are considered to contribute to implementing the plans, including funding schemes focusing on nature conservation, clearing unwanted growth, fencing, maintaining wetlands and ensuring more interconnected nature.
- River Basin Management Plans: On 27 June 2016, the Danish government published the River Basin Management Plans for the second cycle 2015-2021. The plans are being implemented, and at the same time, the preparation of the plans for the third cycle has started. The plans will ensure that Denmark continues its work to achieve the objectives of the Water Framework Directive (WFD). As part of implementing the plans, funding has been granted to establish wetlands, peat-land restoration, and for afforestation on private land. Furthermore, targeted regulation of nitrogen discharge from farmland has been introduced to reduce discharges into vulnerable water bodies. This regulatory measure also contributes to reducing the impact of nitrogen on the aquatic environment.
- In 2018, the Danish government decided to stop granting new licences to extract raw materials and minerals in the northern Sound, so that the area can become a large, coherent marine protected area. In the norther Sound a high number of seabed habitats as well as foraging and breeding areas for a number of important fish species can be found. The area will be designated as a marine protected area under the EU Marine Strategy Directive.
- Funding for designation of forests as biodiversity forest: In the Agreement on the Nature Package, funding has been allocated to designate untouched forest on private land. This funding scheme supplements a funding scheme under the Danish Rural Development Programme for designation of other biodiversity forests on private land.
- Funding for hedgerows: In the Agreement on the Nature Package, funding has been allocated for hedgerows and small plants in order to promote biodiversity in the open countryside and help farmers to manage nature.
- Project on wildlife conservation on farmland ("Markvildtprojekt"): In the Agreement on the Nature

Package, funding has been allocated to continue collaboration with the Danish Hunters' Association on a project to restore wildlife on farmland, "*Markvildtprojektet*". This project includes a targeted effort directed at selected species in the open countryside, and this will help establish more habitats for hares, partridges, larks, etc.

- Simpler regulation for agriculture: In the Agreement on the Nature Package, it was decided to launch a number of initiatives to simplify the rules and make the area less bureaucratic, thus paving the way for more and better nature without complex regulation. For example, flower strips can now be registered as set-aside land and count as part of the 5% Ecological Focus Area (EFA) requirement, instead of land laying fallow in a traditional sense. This has created an incentive to establish green covers with mixtures of seed- and nectar-producing plant species to benefit insects, birds and wildlife. It follows from the agreement that, in order to increase farmers' incentives to establish more areas as nature areas, the former 15-year time limit on farmers' right to re-establish an area as agricultural land has been abolished. This has made it easier and more attractive for landowners to temporarily remove agricultural areas from production, as there is no risk of these areas being covered by section 3 of the Nature Protection Act.
- The Danish Nature Fund: The Danish Nature Fund was founded in January 2015 in collaboration between two Danish foundations (Villum Fonden and Aage V. Jensen Naturfond), and the Danish state. The Danish state has allocated DKK 500 million (EUR 67 million) as start-up capital for the Danish Nature Fund. The fund works to improve the state of nature and the aquatic environment. Furthermore, an independent purpose of the fund is to strengthen popular support for work to restore and protect nature. The Danish Nature Fund has been established as a private, independent, non-profit fund, and according to the Act on the Danish Nature Fund, the fund is subject to a number of requirements to ensure open and good management, including giving the public access to its areas in the same way as the public has access to publicly owned areas.
- In the 2019 Finance Act, the Danish government has allocated another DKK 200 million to achieve new ambitious nature targets.
- The government will work to ensure that the EU Common Agricultural Policy (CAP) being able to better contribute to achieve the EU climate, environmental and sustainability targets after the new agricultural reform. As part of this, Denmark will work to minimise negative incentives in the CAP towards nature and biodiversity.
- In Denmark, a voluntary sector agreement was concluded in 2014 to ensure sustainable biomass from forests for production of electricity and district heating. Moreover, new EU regulations have been adopted with sustainability criteria for forest biomass, including consideration for biodiversity. These regulations will apply from 2021-2030.

Target 4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits

- Strategy for sustainable development: The Danish National Strategy for Sustainable Development ("*Et bæredygtigt Danmark Udvikling i Balance*") was published in October 2014.
- Waste prevention: A Waste Prevention Strategy was launched in 2015, focusing on two crosssectoral themes: Transition in Danish businesses and Green consumption, and on five action areas: Reducing avoidable food waste, Building and construction, Clothing and textiles, Electronic equipment, and Packaging.
- Circular economy: In 2018, the Danish government launched a strategy for circular economy, the aim of which is to promote the circular economy, including better use and recycling of resources

and waste prevention. The strategy includes 17 initiatives broken down into the following action areas: 1. Businesses as the driving force for the transition to the circular economy, 2. Data and digitisation in a circular economy, 3. Circular economy through design, 4. New consumption patterns through circular economy, 5. A proper functioning market for waste and recycled raw materials, 6. Circular economy in buildings and biomass.

- Plastics: In December 2018, the Danish Government launched a national plastic action plan with 27 different initiatives that focus on all significant parts of the plastic challenge: less plastic in nature, smarter production and consumption, more cooperation in the value chain to find circular solutions, better waste management, a strengthened knowledge base and much more recycling of plastic waste. The plastic action plan will support the plastic agenda with 50 million DKK over 4 years.
- Public procurement: The government will continue its initiative concerning government procurement agreements, the Partnership for Green Public Procurement (GPP), the Forum for Sustainable Procurement, "*Rejseholdet for grønne indkøb*" ("the green procurement squad")" and "*Den ansvarlige indkøber*" ("the Responsible Purchaser"). In 2014, binding rules were laid down for procurement by government institutions of sustainable wood. Consequently, since 2016, in their agreements on procurement of goods, construction and services, all ministries, government agencies and directorates have required documentation for use of sustainable wood products. Several other public organisations have committed to use sustainable wood within specific product categories through GPP. There is still focus on procurements that promote sustainable consumption and production, and initiatives to support transition to a more circular economy will be enhanced, for example through the government's strategy for the circular economy. As a further development of the initiative, Total Cost of Ownership (TCO) tools have been developed. These tools can be used to make a long-term assessment of the financial consequences for the enterprise or organisation of acquiring and using a product or a service.
- Ecolabelling: The government will continue its initiative with regard to promoting ecolabelling on the Danish market. The number of ecolabelled products has increased. In 2014-2018, various consultant schemes were set up to support enterprises in using ecolabels on their products and services. The Nordic Swan Ecolabel and the EU Ecolabel develop product-specific, lifecycle-based criteria. This means that all parts of a product (service) lifecycle are considered, and the criteria developed are relevant and provide a real and documented environmental improvement. Ecolabel criteria can benefit biodiversity e.g. when criteria for products containing wood or other renewable resources require that such material, like e.g. wood shall be of certified sustainable origin.
- Environmental technology: The Environmental Technology Development and Demonstration Programme (MUDP) focuses on supporting and promoting development, testing and demonstration of new environmental technology solutions in areas such as water and climate change adaptation, waste and resource efficiency, air and noise, chemicals, polluting enterprises, as well as sustainable construction. Three international analyses were published in 2017, and all of them suggested that Denmark has a relative stronghold in the environmental technology area. Particularly in relation to the global challenge of urbanisation and development of green sustainable cities, MUDP has granted funding for a broad range of enterprises and solutions, developing everything from circular solutions for construction, technology for optimised waste management and utilisation of secondary resources, to air purification technology, waste water solutions and solutions to address climate change issues.

Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

[•] Agreement on the Nature Package: The government is giving priority to stopping the loss of biodi-

versity. In the Agreement on the Nature Package, a number of initiatives have been launched to create positive incentives for landowners to enhance nature. The agreement includes significant initiatives for biodiversity in Danish forests as the designation of 13,800 hectares of untouched forest and other biodiversity forests in state-owned areas. Furthermore, a national funding scheme to designate untouched forest on private land has been established.

- Natura 2000 initiatives: In 2016, Denmark updated its 252 Natura 2000 plans, so that, for all the sites, management measures have been decided and financed for the period 2016-2021. The updated plans put special emphasis on habitats for rare breeding birds, as well as initiatives aimed at creating better cohesion between the nature areas. In the Agreement on the Nature Package from May 2016, the designated Natura 2000 sites were reviewed in order to remove areas which do not contribute to protection of nature and expand the sites with nature areas. As a result, ten new Natura 2000 sites have been designated, and the new designations have been sent to the European Commission for approval.
- River Basin Management Plans: River Basin Management Plans for the cycle 2015 -2021 include measures to help ensure cleaner water in watercourses, lakes, fjords and groundwater.
- Forest programme: In October 2018, the Danish government published a new national forest programme. The new forest programme replaces the forest programme from 2002, and the aim is to set the course for sustainable forest management supporting the many essential functions of forests and ensuring a good balance between using and protecting forests. For example, the forest programme establishes two key goals which build on the objectives from the 2002 forest programme. One is the long-term goal that forest landscapes should cover 20-25% of Denmark by the end of the 21st century. The other goal is that, towards 2040, at least 10% of Denmark's forest cover will have nature and biological diversity as the primary management objective.
- Afforestation: The Danish forest cover is still being expanded through government afforestation as well as private afforestation. In the period 2014-2018, the Danish Nature Agency acquired around 1,300 hectares of fields and converted them into forests and natural areas in connection with government afforestation. Government afforestation serves multiple purposes, not least enabling outdoor recreation close to urban areas and securing groundwater resources, but also the long-term purpose of securing biodiversity. Government afforestation helps to remove CO₂, thereby reducing global warming. Biodiversity considerations have also been integrated into the grant scheme for private afforestation, for example through requirements for species composition with a mixture of tree species, and special requirements for species and bushes in forest edges.
- Mapping of areas protected in accordance with section 3 of the Danish Nature Protection Act: In 2014, the Danish Nature Agency completed a nationwide update of the registration of areas protected in accordance with section 3 of the Nature Protection Act. The results of the update are available in a 2016 report from Aarhus University; see https://dce2.au.dk/pub/TR79.pdf (in Danish). The updated registration forms the basis of future protection of nature. To help landowners take care of protected nature, an app ("*Appen for Beskyttet Natur*") and a webservice ("*Din Natur*") have been developed to give landowners easier access to updated information about protected nature areas on their land. Furthermore, a nature management portal and a nature management guide have been developed to allow landowners easier access to information about nature management.
- Since 2015, the Danish Agricultural Agency has financed a continuing training programme via the Rural Development Programme. Overall, since 2015, approx. 1,600 farmers and consultants have been taught about the options and rules for receiving funding for nature management, and about how to practice nature management with the best possible results. Following a tendering procedure, the Danish Agricultural Agency signed a contract with SEGES to plan and organise the events, with participation by the Danish Agricultural Agency.

Target 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits

Update of initiatives since the 2014 report:

- Marine Strategy: In 2017, Denmark published its programme of measures as part of implementation of the Marine Strategy Framework Directive. The programme of measures includes specific initiatives on the basis of the environmental targets set in 2012. In situations where the existing initiatives were assessed to be insufficient to reach the environmental targets, new initiatives have been included. In order to improve the environmental conditions in the Kattegat, and to meet the requirements of the Marine Strategy Framework Directive for a coherent and representative network of marine protected areas, Denmark designated 590 km² of new marine protected areas in 2016. The designated areas include six marine areas with deep soft seabed in the Danish part of the Kattegat. The areas will be protected against physical disturbance such as fishing with bottom-towed gear, extraction of raw materials and minerals, and dredging and dumping of seabed material. The initiative is part of the programme of measures in the Marine Strategy. Denmark is planning to update the environmental targets in 2019 in an updated Marine Strategy II. The targets will address different themes such as fisheries, eutrophication, contaminants, marine waste and underwater noise. They will also address the status for different species, such as fish, mammals and birds, as well as marine habitats. A revised monitoring programme will follow in 2020, and the programme of measures will be updated in 2021.
- Marine Natura 2000 sites: Vulnerable natural habitats such as stone reefs and bubbling reefs will be mapped and protected against destructive fishing in the marine Natura 2000 sites. Up to now, fisheries regulation has included a ban on the use of a number of types of fishing gear in 32 marine Natura 2000 sites located in the Kattegat, the Danish Straits and the Baltic Sea.
- In 2018, the Danish government decided to stop granting new licences to extract raw materials and minerals in the northern Sound, so that the area can become a large, cohesive marine protected area. In the norther Sound a high number of seabed habitats as well as foraging and breeding areas for a number of important fish species can be found. The area will be designated as a marine protected area under the EU Marine Strategy Directive.
- Sustainable fisheries: Management of Danish fish stocks is not a purely national matter. It is primarily through the EU Common Fisheries Policy (CFP). By setting quotas and management plans, the EU will ensure that the objectives to fish at maximum sustainable yield (MSY) levels are achieved. The EU stipulates inspection requirements and requirements for data collection for use in scientific consultancy. There is also a fisheries development fund providing financing options for the measures necessary for sustainable fisheries management and EU environment directives. In an EU context, there are also multi-year management plans for bottom-dwelling fish stocks (demersal stocks) in the North Sea and for stocks in the Baltic Sea.

Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity

Update of initiatives since the 2014 report:

Organic farming: Denmark has launched a number of activities in the organic farming area. As
part of the 2015 Agreement on the Food and Agriculture Package, an organic business team was
set up, tasked to present recommendations to strengthen market-driven development of the organic sector in Denmark. The team submitted 25 recommendations to the minister in April 2017.
In May 2018, the government presented a growth plan for the Danish organic sector with 39 initiatives to make it easier to be an organic farmer. The plan follows up on recommendations from the

Organic Business Team. The main elements in the growth plan are to earmark more funds for Organic Area Aid in 2018-2019, to make it easier to be an organic farmer, to encourage investment in research and development in the organic sector, to stipulate requirements for nature and the climate in the organic sector, to secure organic farmers better access to manure, and to promote exports. There is high interest in converting to organic farming in Denmark. In order to accommodate the great interest, in 2018 DKK 1,055 million was earmarked for conversions to organic farming. This is DKK 373 million more than had already been earmarked for Organic Area Aid in the Food and Agriculture Package.

- Fauna and game care: Since 2001, DKK 100 per hunting license issued has been spent on initiatives to benefit game and wildlife. Among other things, the funds are used for government afforestation and nature management, subsidies to plant trees and bushes to benefit game, and establishment of wetlands and ponds in the countryside. Finally, since 2013 funds from hunting licences have subsidised the so-called "*Markvildtprojekt*", the purpose of which is to improve conditions for game species in the countryside.
- The government will work for the EU Common Agricultural Policy (CAP) being able to better contribute to meeting the EU climate, nature, environmental and sustainability targets after the new agricultural reform.
- Danish state-owned forests: State-owned forests are managed by the Danish Nature Agency and operated according to the principles of close-to-nature forest management. Most of the state-owned land is certified under the FSC and PEFC and covers a total of 210,000 hectares, of which 110,000 hectares is forest. Of this, as part of the Agreement on the Nature Package, over the next 50 years 13,800 hectares of forest will be designated for biodiversity purposes; 10,200 hectares as untouched forest, and 3,600 hectares as biodiversity forest. The rest of the land is open without forest, including in particular extensive areas with dry sand heaths and inland heaths. The areas are subject to management planning. Planning ensures that management is sustainable through diversified land-use planning which integrates multiple concerns including biodiversity and outdoor recreation and also ensures that forestry can take place to a suitable extent to support for the two primary purposes.
- Subsidies for untouched forest: The 2016 Agreement on the Nature Package established a national funding scheme to designate untouched forest on private land. In 2017, this scheme pledged subsidies to designate 141 hectares of untouched forest in private areas.
- Subsidies for sustainable forestry: Among other things, subsidies are granted for extensification of forestry and forest grazing in private forests. The agreements run for 20 and 5 years, respectively. Under this scheme, in the period 2015-2017 subsidies have been pledged for biodiversity initiatives in about 3,300 hectares of forest.
- Aquaculture: Aquaculture installations must have an environmental permit before establishment or in the event of changes or expansion which lead to increased pollution. Among other things, environmental permits stipulate requirements regarding maximum discharges of nutrients (e.g. nitrogen and phosphor) and other relevant substances. An environmental permit will ensure that the enterprise is operated without polluting the surroundings in a way, which is incompatible with the vulnerability and quality of the surroundings.
- Aquaculture: Through the European Maritime and Fisheries Fund (EMFF) and up until 2021 specific funds have been earmarked to support the transition of the industry to more environmentfriendly and resource-efficient installations that pollute significantly less per produced unit.

Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity

- River Basin Management Plans: The River Basin Management Plans (2015-2021) have the overall objective to reduce discharges of nitrogen into the aquatic environment by 6,900 tonnes by 2021. A reduction of a further 6,200 tonnes N has been postponed until the third plan period, and this reflects the work that, on the basis of current knowledge, has yet to be completed in order to achieve the goal in the Water Framework Directive. The overall reduction target for phosphorus is 15 tonnes. Up to the third planning period, further work is being carried out to obtain more knowledge about phosphorus, as well as how phosphorus initiatives can best be planned.
- Pesticide use: In 2013, the pesticide tax was reorganized, from a value-based tax to a quantitybased tax differentiated according to health and environmental criteria. The target to reduce the pesticide load indicator (PLI) by 40% (PLI of 1.96) based on the sale of pesticides was formally met in 2014-2016. PLI calculated based on use data, however, has not been reduced to the same degree (PLI of 2.19). The effect of stockpiling pesticides in 2012 and 2013, before the tax entered into force, has diminished significantly, although it was still present in 2016.

Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment

- Action plan against invasive species: An action plan against invasive species was published in June 2017. The action plan consists of 36 actions that target efforts against invasive species. The action plan contains a list of invasive species in Denmark. Moreover, a transparent scoring system for species has been drawn up, there is a trade ban on 13 invasive animal and plant species, and a reporting portal has been established, where citizens can report invasive species. The action plan implements the 2014 EU Regulation on Invasive Alien Species. In 2014, an analysis of pathways was prepared in which horticulture was identified as the most significant pathway. In 2018 and 2019 a number of information campaigns were carried out addressing the prioritised pathways, including horticulture.
- Ballast water and invasive species: The Ballast Water Management Convention entered into force on 8 September 2017. Denmark continues to play an active role in the IMO working group on ballast water to further develop and clarify the Convention. Moreover, Denmark is participating in the NOBANIS network on invasive species and in the joint OSPAR-HELCOM task group regarding ballast water and fouling on ship hulls. The Danish EPA is completing a project to test the extent to which marine invasive species can be monitored by using eDNA. Species-specific detection systems have already been developed for more than 20 species. The use of eDNA in marine monitoring is a supplement to existing monitoring. An overall monitoring strategy will be developed in 2020 as a part of Marine Strategy II.
- Environmental targets for the sea (the Marine Strategy Framework Directive): In 2017, Denmark published its programme of measures as part of implementation of the Marine Strategy Framework Directive. The programme of measures includes specific initiatives for alien species and invasive species and it has been developed on the basis of environmental targets set in the 2012 Marine Strategy. Denmark is planning to update the environmental targets in 2019 in a new marine strategy. The targets will address different themes, such as the introduction of alien species and invasive species. The programme of measures will be updated in 2021.
- Natura 2000 planning: In 2016, Denmark updated its 252 Natura 2000 plans, so that, for all the sites, management measures have been decided and financed for the period 2016-2021. One of the particularly prioritised initiatives is to limit invasive species such as the plant Rosa rugosa in Natura 2000 sites.

Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning

Update of initiatives since the 2014 report:

 Pollution from ships: On 1 January 2015, the limit value for sulphur content in marine fuels used in the North Sea and the Baltic Sea was reduced from 1.00% to 0.10%. The regulation was set by the UN International Maritime Organisation (IMO) and the EU and implemented in Danish law. Since the regulation entered into force, the content of sulphur dioxide (SO₂) in the air over Denmark has fallen by more than 50%.

Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes

Update of initiatives since the 2014 report:

- Natura 2000 planning: In 2016, Denmark updated its 252 Natura 2000 plans, so that, for all the sites, management measures have been decided and financed for the period 2016-2021. Approximately 18% of the Danish marine area and more than 8% of the land area are designated. This includes some of the largest and most vulnerable nature areas in Denmark.
- As part of the 2016 Agreement on the Nature Package, over the next 50 years 13,800 hectares of forest will be designated for biodiversity purposes in state-owned forests; 10,200 hectares as untouched forest, and 3,600 hectares as biodiversity forest. A national funding scheme has also been established to designate untouched forest on private land.
- Protected areas in the Kattegat: In order to establish a cohesive and representative network of
 marine protected areas, Denmark designated 590 km² of new protected areas in 2016. The designated areas include six marine areas with deep soft seabed in the Danish part of the Kattegat.
 The areas will be protected against physical disturbance such as fishing with bottom-towed gear,
 extraction of raw materials and minerals, and dredging and dumping of seabed material. Furthermore, Denmark has an ongoing process whereby the sufficiency of the existing network of marine
 protected areas in the central part of the Baltic Sea and the North Sea is being evaluated. The
 process will make it possible to assess whether it is necessary to designate additional marine protected areas. The two initiatives are part of the programme of measures in the Marine Strategy.

Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained

Update of initiatives since the 2014 report:

• Agreement on the Nature Package: As part of the 2016 Agreement on the Nature Package, a number of projects on state-owned land have been carried out which contribute to improving the conditions for endangered species. Funds have been earmarked for government buy-up of areas, with the purpose of establishing large interconnected nature areas which, among other things, will benefit endangered species. In the period from 2017 to 2018, 145 hectares were purchased, typically fields that link existing nature areas. These areas are now being managed to establish new valuable nature. In the state-owned forests, a total of 13,800 hectares of forest will be designated for biodiversity purposes; 10,200 hectares as untouched forest and 3,600 hectares as biodiversity forest. At the same time, funds have been earmarked to designate untouched forest areas and other biodiversity forest areas in private forests. This will benefit a number of endangered species.

- Natura 2000 initiatives: With a number of other initiatives, the Natura 2000 initiatives will help improve conditions for rare and vulnerable species, including the species on the Danish Red List, among other things because 2/3 of the habitats for Red List species is within the Natura 2000 sites. The Natura 2000 plans for 2016-21 have particular focus on rare and endangered breeding birds.
- Species Portal: In cooperation between the Danish Environmental Protection Agency and the Natural History Museum of Denmark, the government will develop Denmark's Species Portal. The Species Portal will collect all public and private data on species including data from the National Monitoring and Assessment Programme for the Aquatic and Terrestrial Environments (NOVANA), research data from universities, and private species data from associations such as the Danish Botanical Society and Danish anglers' organisations. Furthermore, there are also plans to allow citizens themselves to submit species data on what they observe in nature. The Species Portal will be opened gradually as data about different species is gathered and made ready. The first part is planned to open in 2020, while the portal is expected to be fully developed in 2022.
- Green Map of Denmark: Municipal planning for the Green Map of Denmark will contribute to larger and more interconnected nature areas. This will benefit vulnerable species. In this context, the municipalities will use digital nature maps made available by the government to support municipal planning. The digital nature maps include a map of biodiversity showing the most important habitats for endangered and vulnerable species as well as a number of indicators for areas very likely to contain significant natural assets.

Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity

Update of initiatives since the 2014 report:

- Since 2014 there has been an update of the strategy for agricultural plant genetic resources in 2017. The new strategy covers 2017-2020.
- In the livestock area, the conservation committee for Danish livestock genetic resources has drawn up a new strategy for conservation work in the period 2016-2020 to ensure the long-term perspective within conservation work on the indigenous Danish livestock genetic resources.

Target 14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

Update of initiatives since the 2014 report:

• The report on target 15 covers target 14 and target 15.

Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification

Update of initiatives since the 2014 report:

• Agreement on the Nature Package: As part of the Agreement on the Nature Package, funds have been earmarked for government buy-up of areas with a view to establishing large interconnected nature areas which, among other things, will benefit endangered species. In the period from 2017

to 2018, 145 hectares were purchased to link existing nature areas. 10,200 hectares of untouched forest and 3,600 hectares of other biodiversity forest will be designated in state-owned forests and funds have been earmarked to establish untouched forest areas in private forests.

- Restoration of the lake "Søborg Sø" and bogs at Ekkodalen: The government has earmarked funds for two major nature restoration projects. Restoration of the lake "Søborg Sø" in North Zealand will create a magnet for a large number of birds such as ducks, swans and grebes, as well as migratory visitors such as cranes and geese. The new lake means fewer run-offs of nutrients such as nitrogen. Visitors will also be able to enjoy the restored lake land from the paths and view-points. Furthermore, the bogs in Ekkodalen on Bornholm will be restored. The restoration will provide better living conditions for wild fauna and flora. Nature restoration will help safeguard existing habitats, and existing nature areas will be developed into open habitat types. Similarly, larger farmland areas outside the habitat area could be developed into valuable nature which can act as a buffer in relation to nutrients.
- Hammer Bakker: The government and the Danish People's Party have entered into collaboration with, among others, the City of Aalborg and the Danish Nature Fund on a nature restoration project at Hammer Bakker, where 715 hectares of interconnected deciduous forest, heaths and grasslands will be established. This is one of the largest Danish nature restoration projects in recent times, and it will establish better and more coherent natural habitats for rare plants, woodland birds and butterflies.
- Natura 2000 planning contributes to protection and restoration: In 2016, Denmark updated its 252 Natura 2000 plans, so that, for all the sites, management measures have been decided and financed for the period 2016-2021. These plans include special efforts to secure natural hydrology for the natural areas, and in 18 areas there are special initiatives for lowlands at sites for carbon sequestration and expansion of lowland habitat types.
- Initiatives for wetlands including lowland initiatives: Another goal for Denmark is, by 2022, to establish a number of wetlands and lowland projects, corresponding to 13,000 hectares of wetlands and 4,000 hectares of lowland projects. The objectives for wetlands are to reduce discharges of phosphorus and nitrogen, respectively, to the coastal waters, while the lowland projects aim to reduce discharges of nitrogen and emissions of climate gasses from peat soils, and to enhance nature and biodiversity. All three measures entail restoring the natural hydrology and permanent extensification of the land. The project funding schemes will thereby establish new permanent natural areas, and the natural buffer capacity in relation to water transport will be re-established and/or enhanced. The measures are in progress.
- Afforestation: Since 2014, the Danish Nature Agency has acquired about 1,300 hectares of agricultural land on which forest has been planted and open countryside established. This corresponds to about 250 hectares of new state-owned forest in Denmark every year. New stateowned forest close to urban areas is still being established every year. Afforestation is financed in part by state grants in the annual Finance Act, and in part through joint financing with municipalities and waterworks. Government afforestation is primarily to secure the groundwater for many years into the future, and forests are located close to urban areas so that the public can easily visit them. Pesticides and nutrients are not used in these forests and this reduces discharges to the surface water. The forests also sequest CO₂ from the atmosphere. Moreover, subsidies are granted for private afforestation projects with funding from the Danish Rural Development Programme. 5,000 hectares of private forest is expected to be established in the period 2016-2021.
- Nature targets: In the 2019 Finance Act, the Danish government has allocated another DKK 200
 million to achieve new ambitious nature targets up to 2030The aims include more interconnected
 nature, more areas of meadows and dry grasslands and with better protection, and designation of
 more untouched forest areas.

Target 16: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

Update of initiatives since the 2014 report:

- Denmark has been a party in the Nagoya Protocol since it entered into force on 12 October 2014. There is a general overview of Danish implementation of the Nagoya Protocol in the first interim national report, which can be downloaded from ABS Clearing House http://absch.cbd.int/countries/DK.
- In Denmark, the Nagoya Protocol has been implemented through the EU Regulation on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization in the Union. Users in the EU must respect this Regulation. The Regulation itself entered into force in 2014 and the Implementing Regulation entered into force in 2015.
- The Danish Act on sharing benefits arising from utilization of genetic resources was adopted before the EU Regulation in 2012, and in 2017 the Danish Statutory Order on the authority responsible for administration of the Act on sharing benefits arising from utilization of genetic resources and penalties for violation of the Regulation entered into force.
- In 2017, Denmark drew up a supervision plan for compliance with the Regulation in Denmark, and Denmark is working with the other EU Member States on joint initiatives and exchange of experience with regard to implementation of the Regulation and on communication of the provisions of the Regulation.
- The competent authority responsible for compliance with the Protocol and the Regulation in Denmark is the Danish Environmental Protection Agency. The Danish Environmental protection Agency supervises compliance with the Regulation and communicates information about the purpose and obligations under the Protocol via a website and letters to the target group, and by involving stakeholders through dialogue meetings.
- In 2017-18, Denmark carried out a study of enterprises and research institutions potentially affected by the Protocol.
- Denmark has contributed to capacity development in Africa via the ABS capacity development initiative 2010-2015, and in this connection Denmark hosted four international business dialogue meetings.

Target 17: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan

Update of initiatives since the 2014 report:

• Danish Nature Policy: In October 2014, the previous government published the Danish Nature Policy. In 2015, the Danish Nature Policy was submitted to the secretariat for the UN Convention on Biological Diversity as Denmark's national biodiversity strategy. The Danish Nature Policy has since been replaced by new nature-policy initiatives. On the basis of this, Denmark will prepare a new national biodiversity strategy.

Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with

the full and effective participation of indigenous and local communities, at all relevant levels

Update of initiatives since the 2014 report:

 Denmark supports protection of the rights and living conditions of indigenous peoples and promotes the knowledge and methods of indigenous peoples as an important contribution to the protection and sustainable use of biodiversity and ecosystems. Denmark and Greenland have played an important role in ratification of the 2007 UN Declaration on the Rights of Indigenous Peoples (UNDRIP).

Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied

Update of initiatives since the 2014 report:

• Ecosystem services: Denmark is working to implement Target 2 Action 5 in the EU Biodiversity Strategy, which includes a national mapping and assessment of the terrestrial ecosystem services, an assessment of the economic value of these, as well as promotion of integration of these values in the national accounting and reporting systems. See the more detailed description under target 2.

Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties

Update of initiatives since the 2014 report:

Please refer to the statement of Danish financial contributions for the period 2006-2015 submitted to the UN Convention on Biological Diversity in May 2018: https://chm.cbd.int/database/record/206344.

New statements of financial contributions for 2016 and 2017 are expected to be sent to the UN Convention on Biological Diversity in early 2019.

Based on the description of your country's contributions to the achievement of the Aichi Biodiversity Targets, please describe how and to what extent these contributions support the implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals:

In 2017, the government presented its "Action Plan for the UN Sustainable Development Goals - Denmark's follow-up on the UN Sustainable Development Goals". Denmark's international follow-up on the Sustainable Development Goals is described in the development policy and humanitarian strategy. The government will provide an ambitious contribution to global achievement of the goals by following up at national and international levels. The Action Plan sets the framework for government's approach and priorities for follow-up on the Sustainable Development Goals. A large number of the initiatives contributing to meeting the Aichi Targets, among other things, the Agreement on the Nature Package, Natura 2000 plans, River Basin Management Plans and the Danish Marine Strategy also contribute to meeting the UN Sustainable Development Goals, including goal 12 "Ensure sustainable consumption and production patterns", goal 14 "Conserve and sustainably use the oceans, seas and marine resources for sustainable development", and goal 15 "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt

biodiversity loss".

The Government Action Plan is available (in Danish) at: <u>https://www.regeringen.dk/media/3242/150517-handlingsplan-for-fn-verdensmaalene_web.pdf</u>



Ministry of Environment and Food of Denmark Slotsholmsgade 12 DK - 1216 Copenhagen K

www.mfvm.dk



January 2019

Updated biodiversity country profile

Biodiversity facts

Status and trends of biodiversity, including benefits from biodiversity and ecosystem services and functions

Nature and biodiversity in Denmark are the results of landscape development since the ice age as well as of centuries of human impact from agriculture, fisheries, forestry and urban and infrastructural development. According to Statistics Denmark 61,1 % of the total area is agricultural land; 12,7 % is forest and woodland; open habitats cover 8,6 %; buildings etc. and other artificial surfaces cover 8 %; roads, railroads and runways are 5,8 %; lakes and streams cover 2,2 % and 1,7 % is unclassified (data from 2016).

Status and trends for biodiversity in Denmark are regularly reported in national reports. In accordance with the Habitat and Bird Directives status and trends of EU-protected nature areas and species is reported every sixth year. The last reporting was in 2013.

The forest is the natural habitat which is home to most of the endangered species. Many forests are cultivated and their conservation status was in 2013 reported unfavourable bad. However, there are some signs of positive development due to new forests with less intensive forestry and a transition to more natural stewardship and an increase in areas of natural forests.

The area of open, natural habitats as meadows, heaths and commons has remained stable (approximately 10 %), and 31 out of 34 types of habitats were in 2013 reported either unfavourable inadequate, unfavourable bad or unknown.

The proportion of watercourses in at least good status (approx. 50%) based on the appearance of invertebrates has been stable during the past fiveyears, which is a significant improvement compared to 20 years ago (approx. 20%).

In lakes there has been a slightly positive development in central parameters such as chlorophyll during the period 1990-2016 – most significantly in lakes in which the pollution was most severe in 1990.

When looking at the latest 10 years there seem to be diverse signals from various marine parameters. The appearance of higher plants (eelgrass and macro algae) has increased significantly during the past 10 years. Oxygen depletion has varied over the past 10 years, which is mainly explained by meteorological conditions, but nutrients are also an important issue. The amount of algae in coastal waters measured as chlorophyll was higher in 2016 compared to the previous years and reached a level comparable to the level in the 1990'ies and the mid 2000's.

The latest Danish Red List goes back to 2010 and an update is expected in 2019. In the last report from 2010 more than 8.000 species had been evaluated. Approximately 65 % of these species were of least concern, approximately 19 % were near threatened, vulnerable or endangered and around 9 % were critically endangered or regional extinct.

To sum up, biodiversity in Denmark continues to decline in many spheres but there are also some areas in which the speed of decline has slowed and, for some natural habitats and species, there are signs of improvements.

A national mapping of ecosystems has been made and the knowledge on 16 ecosystem services and their value has been assessed. A model to map and assess the value of ecosystem services based on existing data has been developed to analyse synergies and trade-offs among different ecosystems and biodiversity indicators.

Main pressures on and drivers of change to biodiversity (direct and indirect)

Many habitats in Denmark are small and separated, which make them vulnerable and the possibilities for dispersal of species to other suitable habitats could be difficult. Structural changes in agriculture mean that some grassland habitats by succession become scrub/forest. Many agricultural areas are drained and natural hydrology in wet habitats is lacking in many places. Effects of nutrients are seen in flora and in lakes, rivers and coastal waters but nutrient emissions have been reduced the last 30 years: nitrogen content in surface water has been reduced with approximately 50 % since 1990 and atmospheric depositions of nitrogen have been reduced by 35 % since 1990. Danish forests are characterized by forestry e.g. quite young and the amount of big, old trees and dead wood, which are important habitats for many endangered species, is low but the amount of dead wood in forests owned by the state is increasing.

Climate change is expected to have considerable impacts on food webs, plant and animal compositions in habitats and it will impose future threat to coastal biodiversity due to sea level rise.

Measures to enhance implementation of the Convention

Implementation of the NBSAP (National Strategy and Biodiversity Action Plan)

Denmark adopted its first strategy in 1996 and the first Action Plan for Biodiversity and Nature Conservation in 2004. The Danish Biodiversity Strategy from 2014 is currently being revised.

Overall actions taken to contribute to the implementation of the Strategic Plan for Biodiversity 2011-2020

Denmark contributes to the implementation of the Strategic Plan for Biodiversity 2011-2020 mainly through the EU Biodiversity Strategy to 2020. Legislation and implementation are described in the next chapter.

Several political agreements – e.g. Naturpakken from 2016- have contributed to further biodiversity and nature protection by actions to promote e.g. an aquatic environment of high quality; reduction in pesticide effects; reduction in green-house gasses; more biodiversity in forests and improved environmental monitoring.

In 2018 45 forests owned by the state were designated as forests with biodiversity as the main management objective. The new designation means that the area of such forests owned by the state is just about doubled to 22.800 hectares. The new management regime for designated areas will be phased in over a time frame of up to 50 years.

In 2018 approximately 30.000 hectares new nature areas where included as Natura 2000 protected area and approximately the same area of agricultural land and urban areas was removed from Natura 2000 protection.

A new national forest programme was launched in 2018. It sets out the long term goal that towards 2040 at least 10 pct. of the combined Danish forest cover has nature and biodiversity as the primary management objective. Another long term goal is that forest landscapes cover 20 - 25 pct. of the Danish area before end

the 21st century. It further sets out a range of strategic orientation lines and concrete actions to underpin a multifunctional and sustainable development of Danish forest. The strategic orientation lines focuses both on the conservation and enhancement of forest biological diversity on key designated locations as well as promoting general mainstreaming of regards for nature as an integral part of sustainable forest management.

When municipalities review their local planning next time, they are required to map existing and potential new nature areas and corridors to intensify the effort to create less fragmented and larger nature areas (A Green Map of Denmark).

Support mechanisms for national implementation (legislation, funding, capacity-building, coordination, mainstreaming etc.)

National legislation etc

Denmark benefits from a large national legislative framework for biodiversity protection, e.g. Nature Protection Act, Forest Act and the Hunting and Game Management Act. These acts are not described in details here but important rules are that some nature areas are protected when they have a certain size, that most forests cannot be converted to another land use and that Danes have access to large natural areas, such as forests and uncultivated land, and not least to the coasts and state-owned natural areas. Furthermore, the public has access to roads and paths in the countryside, on both privately and publicly owned land, giving people the opportunity to experience nature. Moreover, recreational facilities such as walking and cycling trails, bird towers and shelters are constantly being developed and improved.

All areas protected by specific Nature Conservation Orders have been reviewed by IUCN in 2018. Following the IUCN Protected Area Management Categories Denmark have 378 areas protected as nature conservation areas. Other areas protected by Nature Conservations Orders include e.g. landscapes, historical environments and burial mounds.

There are five national parks in Denmark. These parks hold some of the most unique and valuable nature areas and landscapes in Denmark. The legislative framework on nature protection in the parks is the same as outside.

All wild mammals and birds are protected unless hunting is allowed. All amphibians, reptiles and 10 insect species are protected and the same applies for several endangered plant species, e.g. all orchids, along with some fish species e.g. Fresh Water Lamprey. In approximately 100 wildlife sanctuaries special rules for access are set to protect seals and birdlife.

More than 20 species (e.g. Otter and Cormorant) have special management plans which describe actual status and how the species should be managed in a sustainable way.

EU-regulations

Much legislation in Denmark on nature protection is implementation of EU-regulation. Most important in this context is the Habitats Directive, the Birds Directive, the Water Framework Directive and the Marine Strategy Framework Directive and the Regulation on Invasive Species. Denmark contributes to the EU Biodiversity Strategy to 2020 by implementation and active management of the nature directives.

257 areas in Denmark are protected as part of the Nature 2000 network of most valuable and threatened species and habitats in Europe. These areas cover approximately 8 % of the land area and 18 % of the marine territory. Each area has a specific plan with goals and a management plan. These plans are reviewed every sixth year. Next review is in 2020.

Four national river basin management plans from 2016 together comprise a plan which should lead to cleaner water in lakes, watercourses, coastal waters, seas and groundwater in compliance with the Water Framework Directive. Next review is in 2020.

The Danish Marine Strategy from 2012 illustrates the condition and importance of the Danish marine areas and it sets benchmarks for a good and healthy marine environment for the future. Denmark is planning to update the environmental targets in 2019 in an updated Marine Strategy II.

In 2017 a plan with 36 actions on invasive species was released as part of implementation of the Regulation on Invasive Species.

International

At international level Denmark has ratified several international conventions concerning nature and biodiversity, e.g. Bern, Bonn and Ramsar.

Denmark has ratified the International Treaty for Plant Genetic Resources for Food and Agriculture.

Denmark has signed the Convention on Biological Diversity, The Global Action Plan on Animal Genetic Resources and the Interlaken Declaration on Animal Genetic Resources.

Funding

Funding goes partly to larger projects which restore nature (e.g. raised bogs and river valleys) and partly to management subsidies to nature areas (e.g. grazing, sustainable agriculture and forestry and more flowering species in windbreaks).

On the common EU agricultural policy (CAP) 100 billion euro is assigned for actions in the Danish program for rural development for the period 2014-2020 by the European Agricultural Fund for Rural Development (EAFRD). These financial resources is payed out (including both area based and nonarea based schemes) partly for supporting biodiversity.

"Den Danske Naturfond" was founded in 2015 by the Danish state and two large private conservation foundations. It is the aim and purpose of the fund to promote the protection of nature and water environment in Denmark by implementing measures for the creation and development of natural biotopes as well as for the promotion of the habitats of the animal and plant world.

In addition to this there are a number of organizations and private conservations funds which are major actors in nature protection through land purchase and management.

Mainstreaming

Mainstreaming is provided for in various sectors. For instance Danish policies aim to reduce the environmental impact and the climate gas emission from agriculture by promoting organic farming, reestablishment of wetlands, raising forest on agricultural land, peatland restoration and reduced use of pesticides and nutrients. The common Fisheries Policy in the EU aims at a progressive implementation of an ecosystem-based approach to fisheries management. Fisheries regulations haves been established in marine Nature 2000-protected areas. Integration of conservation values in spatial planning is strong and municipals are obliged to establish "A Green Map of Denmark" for development and management of nature areas.

Mechanisms for monitoring and reviewing implementation

In 1987 a national monitoring program on groundwater and air pollution was established, and from 2004 it includes nature. The program (NOVANA) provides data on e.g. actual environmental status and development in both aquatic and terrestrial nature to fulfil obligations in EU-regulations and conventions. In total more

than 250.000 surveys are done in more than 35.000 places during the program 2017-21. Data from the monitoring program is available for everyone in public databases (Danish Environment Portal) when quality is assured. Results are also published in printed reports or as web publications.

In addition to the NOVANA program, there is an independent national program which monitors Danish forests and woodlands. An overall report is published for each five-year measurement period.

A new species information centre ("Artsportalen") is under development in collaboration between The National Natural History Museum and The Environmental Protection Agency and partly funded from private conservation foundations. Planed release for some species is in 2020.