Denmark

Sustainable Biomass Program (SBP)

Revised Regional Risk Assessment for Denmark

Version 2.0

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In the case of inconsistency between translations, the official English language version shall always take precedence.

SBP welcomes comments and suggestions for changes, revisions and / or clarifications on all of its Standards documentation. Please contact: **info@sbp-cert.org**

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Abbreviations

AMO	Arbejdsmiljøorganisation (Work Environment Organisation)
APV	Arbejdsmarkedspladsvurdering (labour market assessment)
BNBO	Boringsnære beskyttelsesområder ("near-well protected areas")
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CVR	Centrale Virksomhedsregister (Central Business Register)
DCE	Danish Centre for Environment and Energy
DM&E	Danske Maskinstationer og Entreprenører (Danish Machine Rentals and Entrepreneurs)
DMU	Danmarks Miljøundersøgelser (National Environmental Research Institute of Denmark)
ENGO	Environmental non-governmental organisation
EU	European Union
EUTR	European Union Timber Regulation
FAO	Food and Agriculture Organisation
FMU	Forest management unit
FSC	Forest Stewardship Council
GIS	Geographical information system
GLS-A	Gartneri-, Land- og Skovbrugets Arbejdsgivere (Horticulture, Agriculture and Forestry Employers)
GM	Genetically modified
GMO	Genetically modified organism
GROT	Grene og toppe (tree branches and treetops)
HCV	High conservation value
HNV	High nature value
IDA	Ingeniørforeningen i Danmark (The Danish Society of Engineers)
IGN	Institut for Geovidenskab og Naturforvaltning (Department of Geosciences and Nature Management)
ILO	International Labour Organisation
IPM	Integrated pest management
ITUC	International Trade Union Confederation
LULUCF	Land use, land change and forestry
NFI	National forest inventory
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
PEFC	Programme for the Endorsement of Forest Certification
RED	Renewable Energy Directive
RRA	Regional risk assessment
RUT	Registret for Udenlandske Tjenesteydere (Register of Foreign Service Providers)
SBP	Sustainable Biomass Program
SFDA	Sustainable Forest Development Act
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
VAT	Value-added tax
WKH	Woodland key habitat

Foreword

Regional Risk Assessments (RRAs) are a key part of SBP's focus on identifying and managing risks associated with sustainably sourcing feedstock for biomass production. With an RRA covering an entire geographic region, and determining the risks associated with sourcing feedstock from that region, the need for individual Biomass Producers to conduct risk assessments is avoided, leading to an efficient and consistent risk assessment process. RRAs also ensure active engagement with a diverse range of stakeholders in the region.

SBP-endorsed RRAs remain valid for a period of five (5) years from their publication date. The SBP Regional Risk Assessment Procedure allows for the development of new RRAs, and the review and revision of existing SBP-endorsed RRAs. The need for review and revision may be triggered by new or updated information, changes in legislation, stakeholder feedback, revision of SBP Standards 1 and 2, or expiry of the validity of the SBP-endorsed RRA.

As a result of the Standards Development Process launched in May 2020, both SBP Standards 1 and 2 were revised, thus triggering the review of all existing SBP-endorsed RRAs. A Working Body (WB) was appointed for each of the existing SBP-endorsed RRAs and was responsible for their review and revision. Indufor Oy was appointed by SBP to review and revise the SBP-endorsed RRA for Denmark (v1.0).

A revised RRA is subject to public consultation. The WB is responsible for holding the first public consultation of the revised RRA, following which amendments are made, if necessary, and the revised RRA submitted to SBP. The SBP Technical Committee reviews the revised RRA, which is then subject to a second public consultation held by SBP. Subject to any amendments following the second public consultation SBP, in consultation with its Technical Committee, considers the revised RRA for endorsement.

This SBP-endorsed RRA for Denmark is aligned with the requirements of SBP Standards 1 and 2 (v2.0), and the requirements of the re-cast EU Renewable Energy Directive (REDII) relating to feedstock compliance. Note that to produce REDII-compliant biomass, Biomass Producers must comply with the relevant SBP Standards and Instruction Document REDII: Bridging Requirements for Meeting REDII. Compliance with REDII requirements is mandatory for all Certificate Holders.

1 Introduction

The Sustainable Biomass Program (SBP) has endorsed Regional Risk Assessments (RRAs) for several countries and territories including Denmark.

This report describes the revision of the first SBP-endorsed Regional Risk Assessment (RRA) for Denmark published as Version 1.0 in June 2017. The revision was conducted in accordance with the recently updated SBP Regional Risk Assessment Procedure Version 1.2 and draws on criteria and indicators set out in SBP Standard 1: Feedstock Compliance Version 2.0 (March 2023) and taking into account SBP Standard 2: Feedstock Verification (March 2023).

The revision covers all indicators in the new Standard 1 many of which are new or revised.

The revision draws on many sources of information including applicable legislation, reports from state authorities and other stakeholders, various databases and statistical data sources.

For each criterion, detailed descriptions and analyses are presented and a risk class is assigned to each indicator as set out in Annex 1. The revised draft of the RRA has been prepared by a Working Body comprising four forestry and certification experts from Indufor with the support of an expert on Danish forestry and forest certification hired by Indufor.

2 Regional background and statement of scope

2.1 Regional background

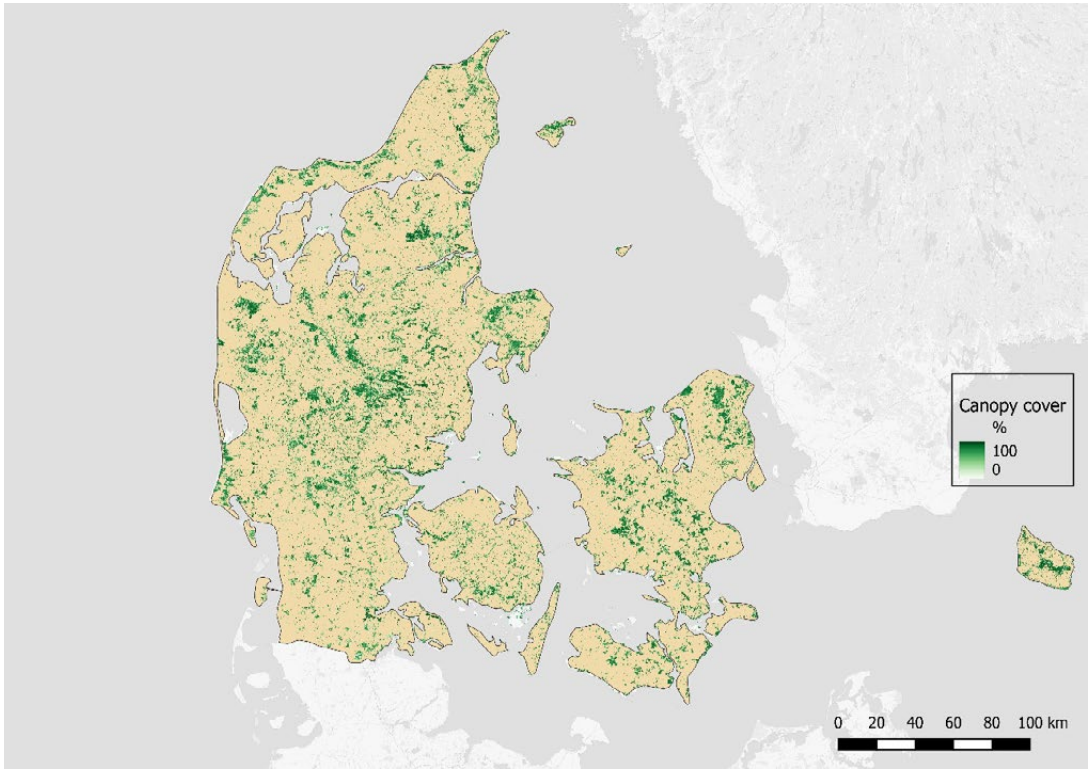
The territory of Denmark excluding Greenland and the Faroe Islands (hereafter referred to as Denmark, Figure 2.1) is split into two EU biogeographical regions through a north-south divide across the middle of the Jutland peninsula:

1) the Atlantic region covers the western part of Jutland, and

2) the Continental region covers the eastern part of Jutland and Denmark's islands.

The Danish Nature Agency provides reports to the EU Commission on Natura 2000 conservation areas for each of these biogeographical regions.

Figure 2.1 Map of Denmark[1]



1 Canopy cover: Nord-Larsen et al. 2017; administrative boundaries: made with Natural Earth; Base map: map tiles by CartoDB, under CC BY 3.0. Data by OpenStreetMap, under ODbL.

In the early 1800s, forest cover in Denmark is estimated to have been only 34% of the total land area. Forest loss was caused by logging for timber or firewood and by animal grazing. Denmark's first forest legislation came into force in 1805. Its main objective, as with subsequent forest acts, was to maintain forest cover and to protect existing forest from over-exploitation, premature felling or grazing by farm animals. In the mid-nineteenth century, intensive forest management became widespread and large afforestation projects were undertaken. Currently, forest cover is approximately 15% (640,000 ha) of Denmark's land area with various forest-types (Nord-Larsen et al. 2023).

According to the latest Danish National Forest Inventory (NFI), 44% of Denmark's forest area is predominantly broadleaved tree species, 35% coniferous tree species, 11% mixed coniferous and broadleaved tree species, 6% Christmas tree plantations (located within all of the listed forest types), 2% is temporarily unstocked and 2% is auxiliary areas (e.g. log-loading and landing yards and fire-prevention areas) (Nord-Larsen et al. 2023).

About 67% of the Danish forest area comprises even-aged planted-stands, 7% even-aged stands from natural regeneration, 10% uneven-aged managed-stands, 5% uneven-aged natural forests, 1% forests managed using traditional or ancient practices, 4% with protective forests (i.e. forests protecting land and soil), 4% with forests having other or unknown management types, and 2% unstocked (auxiliary) areas (Nord-Larsen et al., 2023).

The uneven-aged natural forests represent pockets of forest that would be closest to what is considered as natural forest-stands having retained or regained natural forest characteristics. Such forests can be found under both private and public ownership and are predominantly located in the continental region (east Jutland and the isles). The location of natural forest-stands is generally well known. However, locally-important, small-scale key forest biotopes might remain unmapped.

Of Denmark's 640,000 ha of forest, nearly 446,000 ha (about 70%) are managed as forest reserves (called "fredskov" in Danish: Table 2.1) and governed under the Danish Forest Act. The areas designated as "fredskov" must permanently remain as forest land: the forest-owner is obliged to re-establish the forest-stand after logging and the stand must be able to develop into high forest ("højstammet skov" in Danish).

The Forest Act permits forest management activities within these areas. Article 9 of the Act requires that the managed area shall maintain continuous forest cover, that a maximum of 10% of the forest area can be used for short-rotation Christmas tree or greenery production (e.g. foliage cuttings typically from Abies procera) and another maximum of 10% of the area can be used for coppicing or animal grazing.

The Forest Act also protects streams and wetlands in forests that are not covered by the Nature Protection Act or under the jurisdiction of the Ministry of Environment or local authorities. It stipulates that lakes, bogs, heaths, species-rich grasslands, coastal grasslands, and swamps located in the "fredskov" shall not be planted or cultivated, drained or changed in any other way. However, it is important to note that the Forest Act does not contain many measures relating to forestry techniques such as harvesting, planting or thinning.

Table 2.1: Area and share of fredskov and other forests in 2021

Land use	Forests outside of fredskov, ha	Fredskov, ha	Total forest area, ha
Forest, coniferous	55,362	168,467	223,829
Forest, deciduous	81,976	202,904	284,881
Forest, mixed	24,511	45,398	69,909
Christmas tree production	25,226	10,022	35,248
Temporarily unstocked forest	4,275	9,242	13,518
Auxiliary areas in forests	3,539	9,912	13,450
Total	**194,890**	**445,945**	**640,835**

Source: Data underlying the Danish NFI (Nord-Larsen et al., 2023)

In Denmark, 194,890 ha of forest is not classified as fredskov and is therefore not covered by the Forest Act (Table 2.1). Only 54,710 ha (28%) of the forest not covered by the Forest Act is protected by the Nature Protection Act.

This means that 140,180 ha of forests in Denmark are covered neither by the Forest Act nor the Nature Protection Act (source: Thomas Nord-Larsen, Forest and Landscape, Copenhagen University). However, it should be noted that the Danish Environmental Impact Assessment legislation protects forest not covered by the Forest Act from being converted to agricultural land (lov om miljøvurdering af planer og programmer og af konkrete projekter (VVM)) https://www.retsinformation.dk/eli/lta/2021/1976).

Table 2.2: Danish nature area outside of "fredskov" and protected by the Nature Protection Act

Forest type	Area, ha
Meadow (Eng)	5,148
Heathlands (Hede)	17,144
Bogs and peatlands (Mose)	24,305
Grasslands (Overdrev)	4,752
Coastal meadow (Strandeng)	628
Lake (Sø)	2,733
Total	**54,710**

Source: Data underlying the Danish NFI (Nord-Larsen et al., 2023)

There are 76,500 ha of forest designated as Natura 2000 areas[2] (12% of the Danish forest area) which includes some overlap with the 70,900 ha of forest designated under the EU Habitats Directive, 49,100 ha under the EU Birds Directive and 9,700 ha as Ramsar sites (Nord-Larsen et al. 2023). A harvesting permit must be obtained from the Danish Environmental Protection Agency to conduct any timber harvesting activities within Natura 2000 forests. Permits to harvest Natura 2000 forests are given with the provision that the natural condition of the forests will not deteriorate.

In relation to areas with high conservation value (HCV), it is worth noting that although Article 25 of the Forest Act sets provisions for registering 'especially valuable forests' (i.e. valuable in terms of their biodiversity and conservation status and accompanying appropriate conservation management activities), the stakeholder consultation suggests that not all such areas have yet been systematically identified and registered.

The registration of such areas in private forests started in 2022 and is expected to be completed in 2024. Consultation with stakeholders reveals that only some small biotopes (i.e., lakes, bogs, heaths, salt marshes or beach swamps, fresh meadows, and biological grasslands located in the forests that are not covered by the Forest Act and Article 3 of the Nature Protection Act) are systematically identified and mapped. All 'especially valuable forest' in the state forests is already mapped.

2 Denmark has about 87,000 ha of Natura 2000 areas including forests (Natura 2000 care plans (naturstyrelsen.dk)).

Forest ownership in Denmark is divided between private forest owners (71%), state and municipal owners (22%), trust funds or foundations (5.5%) and other owners (1.5%) (Nord-Larsen et al. 2023). Significant areas of state forest are owned by several ministries, notably the Ministry of Defence (military training grounds), the Ministry of Finance (castles and gardens), the Ministry of Justice (forests, heaths, fields around prisons and similar institutions), the Ministry of Transport and Energy (road and coastal constructions) and the Ministry of Science (experimental farms and forests associated with universities) (Danish Nature Agency 2023[3]).

2.2 Statement of scope and sub-scopes

The geographical scope for this RRA revision is the territory of Denmark excluding Greenland and the Faroe Islands. As with the original RRA for Denmark (June 2017), this revision covers wood-based primary feedstock[4] from forests including forest residues[5]. Processing-residues[6] that have been produced from wood (i.e. raw materials) harvested in Denmark are also covered by this revision. Imported feedstock or processing residues from raw materials that originated outside Denmark are excluded from this RRA.

According to the latest biomass analysis by the Danish Energy Agency (May 2020), woody biomass accounted for 48% of the fuel combusted to produce renewable energy. in Denmark. In 2018, the country imported about 53% of the wood chips (and other woody biomass – wood pellets, firewood and wood waste) it consumed (Danish Energy Agency 2022a), and the rest came from domestically-sourced wood-based feedstock. The RRA revision covers only domestically-sourced wood-based feedstock originating from all forests[7] i.e. the forests covered by the Danish Forest Act (70% of total forests) and the forests that are not covered by the Danish Forest Act. Trees outside forests (TOF) are excluded from this RRA revision. A separate RRA for TOF in Denmark is being prepared by SBP.

As discussed in section 2.1, the legislative and regulatory regimes are different for the forests covered by the Danish Forest Act and the forests not covered by the Act. Therefore, the risk profiles for at least some indicators of these two legal forest types are different. To capture this, the RRA assessment is done using two subscopes: (i) forests covered by the Danish Forest Act and (ii) forests not covered by the Danish Forest Act. It is natural that for some indicators the risk profiles are the same under both sub-scopes. Nevertheless, for the purpose of consistency in the RRA document, sub-scopes are used in all indicators.

3 Available at Operation and care (naturstyrelsen.dk).

4 The primary feedstock is defined as in the SBP Glossary of Terms and Definitions (v2.0,May 2023): 'Feedstock resulted from forestry operations and harvesting of trees from non-forest sourcing areas.'

5 According to SBP Glossary of Terms and Definitions (v2.0, May 2023), 'a forest residue is a feedstock directly generated in the forest for which there is no alternative use. These residues do not include residues from related industries or processing. Examples include feedstock comprising branch wood, diseased wood and storm salvage from natural disturbances, end of life timber plantations, or tree tops'.

6 Processing residues are defined – as per the SBP Glossary of Terms and Definitions (v2.0,May 2023) – as the feedstock such as bark, sawdust, slab wood or residues arising from a primary or secondary wood processor; any wood rejected by a sawmill. Sawdust, shavings produced during the processing of wood at the sawmill / wood industry. Chips, offcuts produced during the processing of wood at the sawmill / wood industry, that may include small offcuts or also bark that has been stripped from the wood.

7 As suggested by SBP Glossary of Terms and Definitions (v2.0, May 2023), the FAO definition of forests is applied. According to the FAO definition, forests are "land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use" (FAO 2020).

2.3 Overview of the local biomass sector

Wood plays an important role in renewable energy production in Denmark: over half of the total amount of harvested wood is used for energy (firewood, wood chips, round wood) whilst the rest is used for timber (Nord-Larsen et al. 2023).

Over the latest inventory period (2017-2021), 2.8 million m^3 of wood was harvested annually, meaning that over 1.4 million m^3 of domestic wood was combusted for energy. In 2021, woodfuel accounted for 44% of the fuel combusted to produce renewable energy.

Renewable energy accounts for 40% of Denmark's total energy consumption. 68% of the total amount of wood used in electricity and heat production was imported whilst 32% was of domestic origin in 2021 (Danish Energy Agency 2022b). Financial support such as feed-in tariffs and feed-in premiums, along with tax exemptions are used to support the transition to bioenergy. The Danish Energy Agency regulates bioenergy support, the Danish Ministry of Taxation regulates energy and CO_2 taxes, and Energinet.dk administers the bioenergy support schemes (Danish Energy Agency: "Facts about bioenergy in Denmark").

Over the years, more and more power plants have switched from fossil fuels to wood pellets, wood chips and straw. As of 2018, there were almost 300 power plants running partly or fully on biomass in Denmark (Danish Energy Agency 2020) and the number of such plants has certainly increased since then. There are eight such large-scale ('central') CHP and heating plants (Danish Energy Agency 2020). Three of the plants are located in the Capital region (Copenhagen, Avedøre (southern suburb of Copenhagen) and Bornholm), two in South Denmark (Odense and Skærbæk) and three in Central Denmark (Herning, Randers, and Aarhus). Four of the large plants use wood chips and two use wood pellets. Two use mainly fossil fuels (coal), one uses wood pellets and the other uses straw supplementally.

The electric capacity of the large plants is typically between 200 and 400 MW (Danish Energy Agency and Energinet 2018). In addition to the large plants, there were a little over 280 smaller biomass-powered power plants in 2018 (Danish Energy Agency 2020). Their capacities range between 1 and 50 MW with most having a capacity below 10 MW (Danish Energy Agency and Energinet 2018). In 2018, about 70% of the smaller plants used wood as fuel either fully or partly, falling into the following categories based on fuel type: wood chips; wood pellets; wood and biomass waste; waste and wood chips; waste and wood and biomass waste; fossil and wood chips; fossil and wood pellets. Over 50% of the plants used only wood.

3 Methodology

3.1 Data collection

Necessary data for this RRA revision is collected mainly through desktop searches from a range of sources. The sources include applicable Danish and EU legislation and regulations, reports and articles from relevant Danish ministries and state authorities, NGO and industry bodies, various databases as well as technical and scientific reports. Notable Danish ministries and state authorities from where data is collected include the Ministry of Environment; Ministry of Climate, Energy and Utilities; Ministry of Employment; Danish Nature Agency; Danish Environmental Protection Agency; Danish Energy Agency; Danish Working Environment Authority.

Support from the Danish forestry and certification expert was taken in identifying the data sources and collecting the data. The data used in this RRA revision is validated by cross-checking with multiple sources whenever possible. Support from the Danish forestry and certification expert is also taken for validating the data.

3.2 Selection of indicators to be updated

Updated SBP Standards 1–6 were approved in March 2023 following a comprehensive review process. The updated criteria and indicators in Standard 1: Feedstock Compliance now form version 2.0 (v2.0) and these provide the framework for undertaking a new Supply Base Evaluation (SBE).

Standard 1 (v2.0) includes 10 new indicators and most other indicators from v1.0 have been revised. The availability of new information relevant to nearly all indicators meant that some level of updating of the previous Danish RRA (2017) was necessary.

The three levels of update are categorised as follows:

- **New additions:** For new indicators in Standard 1 (v2.0), detailed SBE findings have been developed from scratch.
- **Major updates:** For the revised indicators in Standard 1 (v2.0) that were partially aligned with the indicators assessed in the original Danish RRA (2017), a new SBE assessment has been made including an information review, analysis and updated risk classification.
- **Minor updates:** For the revised indicators in Standard 1 (v2.0) that almost fully matched indicators from the original Danish RRA (2017), the information in the detailed findings of the SBE assessments is updated. Originally assigned risk classes have been reviewed and changed when necessary.

The level of update for each indicator is shown in Tables 3.1 to 3.4 on pages 9 to 14.

Table 3.1:

Principle 1 – Feedstock is legally sourced

Criterion 1.1 – Operators and operations are legal

Indicator in SBP Standard 1 (v2.0)	Matching indicator in RRA Denmark (June 2017)	Level of update
1.1.1: Operations related to feedstock sourcing and biomass production shall comply with all existing applicable laws and regulations.	None.	New addition
1.1.2: Legal ownership of land and resource use rights shall be respected.	1.2.1: Legality of ownership and land use can be demonstrated for the Supply Base.	Minor
1.1.3: Feedstock shall be legally harvested, supplied and produced, including in compliance with CITES, EUTR and other applicable legal trade requirements.	1.3.1: Feedstock is legally harvested and supplied and is in compliance with EUTR legality requirements, and 1.5.1: Feedstock is supplied in compliance with the requirements of CITES.	Major
1.1.4: Payments for harvest rights and feedstock, including duties, relevant royalties and taxes related to timber harvesting shall, be complete and up to date.	1.4.1: Payments for harvest rights and timber, including duties, relevant royalties and taxes related to timber harvesting, are complete and up to date.	Minor
1.1.5: There shall be adequate protection of the Supply Base from unauthorised and illegal activities, such as illegal logging, mining, and encroachment.	2.4.3: There is adequate protection of the forest from unauthorised activities, such as illegal logging, mining and encroachment.	Minor

Table 3.2:

Principle 2 – Feedstock sourcing does not harm the environment

Criterion 2.1 – Biodiversity is maintained or enhanced

Indicator in SBP Standard 1 (v2.0)	Matching indicator in RRA Denmark (June 2017)	Level of update
2.1.1: Key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be identified.	2.1.1: Forests and other areas with high conservation values in the Supply Base are identified and mapped.	Major
2.1.2: Threats to and impacts on the identified key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be identified and evaluated.	2.1.2: Potential threats to forests and other areas with high conservation values from forest management activities are identified and addressed.	Major
2.1.3: Key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be maintained or enhanced.	2.2.4: Biodiversity is protected.	Major

Criterion 2.2 – Ecosystem productivity, functions, and services are maintained or enhanced

Indicator in SBP Standard 1 (v2.0)	Matching indicator in RRA Denmark (June 2017)	Level of update
2.2.1: Feedstock shall not be sourced from land that had one of the following statuses in January 2008 and no longer has that status due to land conversion: a. Forests b. Wetlands c. Peatlands d. Highly biodiverse grasslands.	2.1.3: Feedstock is not sourced from forests converted to production plantation forest or non-forest lands after January 2008.	Major
2.2.2: Ecosystems, their health, vitality, functions and services in the Supply Base shall be maintained or enhanced.	2.2.3: Key ecosystems and habitats are conserved or set aside in their natural state.	Major
2.2.3: Soil quality in the Supply Base shall be maintained or enhanced.	2.2.2: Feedstock is sourced from forests where management maintains or improves soil quality.	Minor
2.2.4: Where the removal of harvest forest residues and / or stumps occurs, this shall not lead to irreversible negative impacts to the ecosystem.	2.2.5: The process of residue removal minimises harm to ecosystems.	Minor
2.2.5: Quality and quantity of ground water, surface water and water downstream shall be maintained or enhanced.	2.2.6: Negative impacts on groundwater, surface water, and water downstream from forest management are minimised.	Minor
2.2.6: Air emissions shall comply with national legislation or in the absence of national legislation with industry best practice.	2.2.7: Air quality is not adversely affected by forest management activities.	Minor
2.2.7: Pesticides shall only be used as part of an Integrated Pest Management (IPM) plan in compliance with national legislation, chemical safety data sheets and industry best practice. Banned pesticides shall not be used	2.2.8: There is controlled and appropriate use of chemicals, and that integrated pest management (IPM) is implemented wherever possible in forest management activities.	Major
2.2.8: Waste shall be disposed of in an environmentally appropriate manner.	2.2.9: Methods of waste disposal minimise negative impacts on forest ecosystems.	Minor
2.2.9: Harvesting levels shall be justified as to how they can be sustained with reference to inventory and growth data for the Supply Base.	2.3.1: Analysis shows that feedstock harvesting does not exceed the long-term production capacity of the forest, avoids significant negative impacts on forest productivity and ensures long-term economic viability. Harvest levels are justified by inventory and growth data.	Minor
2.2.10: Harvested areas shall be regenerated.	None.	New addition
2.2.11: The impacts of natural processes such as fires, pests and diseases shall be managed.	2.4.2: Natural processes, such as fires, pests and diseases are managed appropriately.	Minor
2.2.12: Genetically modified trees shall not be used.	2.10.1: Genetically modified trees are not used.	Minor

Table 3.3:

Principle 3 – Feedstock is only sourced from supply bases where the forest carbon stock is stable or increasing in the long term

Criterion 3.1 – Feedstock sourcing is consistent with international requirements for land use, land-use change and forestry (LULUCF) emissions

Indicator in SBP Standard 1 (v2.0)	Matching indicator in RRA Denmark (June 2017)	Level of update
3.1.1: LULUCF emissions shall be accounted for through one of the following routes: Route A Feedstock may be sourced from a country of origin which is party to the Paris Agreement, and which has submitted a Nationally Determined Contribution to the United Nations Framework Convention on Climate Change (UNFCCC) covering carbon emissions and removals from agriculture, forestry and land use which ensure the changes in carbon stock associated with biomass harvest are counted towards the country's commitment to reduce or limit greenhouse gas emissions, or Route B Feedstock may be sourced from a country of origin which is party to the Paris Agreement and has national or sub-national laws in place (developed in accordance with Article 5 of the Paris Agreement and applicable in the area of harvest), to conserve and enhance carbon stocks and sinks, and provided there is evidence that reported LULUCF-sector emissions do not exceed removals, or Route C Feedstock may be sourced from a Supply Base where an assessment demonstrates that both the carbon stock is stable, and the forests' capacity to act as a carbon sink is stable or increasing over the long term.	2.9.2: Analysis demonstrates that feedstock harvesting does not diminish the capability of the forest to act as an effective sink or store of carbon over the long term.	Major

Criterion 3.2 – Carbon stocks in the forest area of the Supply Base are stable or increasing in the long term

Indicator in SBP Standard 1 (v2.0)	Matching indicator in RRA Denmark (June 2017)	Level of update
3.2.1: All feedstock sourcing shall be consistent with either of these two options: Option A. Feedstock may be sourced from Supply Bases where an assessment of the Supply Base shows that the forest carbon stocks are stable or increasing, or Option B. Feedstock may be sourced, if the assessment shows that the forest carbon stocks are declining in the Supply Base, provided that the decline is due to natural processes (fire, pests etc.), and sourcing of feedstock has the aim to recover feedstock that would otherwise be lost or to assist regeneration.	None.	New addition
3.2.2: Primary feedstock shall not be sourced from forest areas where site productivity is low and, according to local definitions or norms, the areas are classified as low-productive or difficult to regenerate.	None.	New addition
3.2.3: Primary feedstock shall not be sourced from forest areas in the Supply Base which, according to local definitions or norms, are classified as having combined attributes of high carbon stocks and high conservation value (HCV).	2.1.1: Forests and other areas with high conservation values in the Supply Base are identified and mapped. 2.9.1: Feedstock is not sourced from areas that had high carbon stocks in January 2008 and no longer have those high carbon stocks.	Major

Criterion 3.3 – Feedstock sourcing shall not compete with wood sourcing for long-lived wood products

Indicator in SBP Standard 1 (v2.0)	Matching indicator in RRA Denmark (June 2017)	Level of update
3.3.1: Feedstock sourcing shall be in compliance with the principles of cascading use, high-quality stem wood shall not be used as feedstock if it is in substantial demand for long-lived products in the Supply Base.	New.	New addition

Table 3.4:

Principle 4 – Feedstock sourcing benefits people and communities

Criterion 4.1 – Decent working conditions are provided, and labour rights are safeguarded

Indicator in SBP Standard 1 (v2.0)	Matching indicator in RRA Denmark (June 2017)	Level of update
4.1.1: Freedom of association and the right to collective bargaining shall be respected in the workplace.	2.7.1: Freedom of Association and the effective recognition of the right to collective bargaining are respected.	Minor
4.1.2: Forced or compulsory labour shall not be used.	2.7.2: Feedstock is not supplied using any form of compulsory labour.	Minor
4.1.3: Child labour shall not be used.	2.7.3: Feedstock is not supplied using child labour.	Minor
4.1.4: Workers shall not be discriminated in hiring, remuneration, access to training, promotion, termination or retirement.	2.7.4: Feedstock is not supplied using labour which is discriminated against in respect of employment and occupation.	Minor
4.1.5: Wages paid to workers shall meet or exceed the legal minimum wage or where there is no statutory minimum wage industry norms shall be met or exceeded.	2.7.5: Feedstock is supplied using labour where the pay and employment conditions are fair and meet, or exceed, minimum requirements.	Minor
4.1.6: Working hours shall comply with legal requirements.	None.	New addition
4.1.7: Workers shall have access to health care provisions, sickness benefits, retirement benefits, invalidity benefits, death benefits, workers' compensation.	None.	New addition
4.1.8: Training shall be provided for all workers to allow them to implement the conditions set out in all elements of the SBP standards relevant to their responsibilities.	2.3.2: Adequate training is provided for all personnel, including employees and contractors.	Minor
4.1.9: Mechanisms shall be in place for resolving grievances and disputes in the workplace.	2.6.1: Appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.	Minor
4.1.10: Safeguards shall be put in place to protect the health and safety of workers by developing, communicating and implementing policies and procedures.	2.8.1: Appropriate safeguards are put in place to protect the health and safety of forest workers.	Minor

Criterion 4.2 – Feedstock sourcing benefits communities

Indicator in SBP Standard 1 (v2.0)	Matching indicator in RRA Denmark (June 2017)	Level of update
4.2.1: Negative social and community impacts shall be identified and avoided.	None.	New addition
4.2.2: Feedstock sourcing shall positively contribute to the local economy, including employment.	2.3.3: Analysis shows that feedstock harvesting and biomass production positively contribute to the local economy including employment.	Minor
4.2.3: Food, water supply or high conservation values (HCV) that are essential for the fulfilment of basic needs of communities shall be maintained or enhanced.	2.5.2: Production of feedstock does not endanger food, water supply or subsistence means of communities, where the use of this specific feedstock or water is essential for the fulfilment of basic needs.	Minor
4.2.4: Legal, customary, and traditional tenure and use rights of Indigenous Peoples and local communities related to the Supply Base shall be identified, documented, and respected.	2.5.1: The legal, customary and traditional tenure and use rights of indigenous peoples and local communities related to the forest, are identified, documented and respected.	Minor
4.2.5: Mechanisms shall be in place for resolving grievances and disputes, relating to tenure and use rights of the forest and other land management practices.	2.6.1: Appropriate mechanisms are in place for resolving grievances and disputes, including those relating to tenure and use rights, to forest management practices and to work conditions.	Minor
4.2.6: Where Indigenous Peoples' rights are identified in the Supply Base, and FPIC has not been achieved for the proposed and planned activities, a consultation and, if required, accommodation process shall be put in place.	None.	New addition
4.2.7: Designated cultural heritage sites shall be preserved.	None.	New addition

3.3 Risk classification

Through a thorough analysis, each indicator was assigned as having either a low or specified risk class. The analysis examined (i) the applicable legislative, regulatory framework or industry best practices on the specific issues addressed by the criteria and indicator in question, (ii) mechanisms for implementation or enforcement, (iii) monitoring procedures (presence or absence and frequency or quality), and (iv) current situation on compliance if the information was available. Additionally, risk conclusion and justification were given for the risk class assigned for each indicator.

For assigning the risk class to an indicator, we followed the guidance given in SBP Standard 2: Feedstock Verification (v2.0) (article 6.3).

– An indicator is assigned with a low-risk class,

  - if legislation that addresses the requirement(s) in SBP Standard 1 exists and is enforced, and legal compliance within the Supply Base can be demonstrated; or

    in the absence of existing applicable legislation or lack of legal enforcement, by assessing whether the best practice – that demonstrates conformance with the requirements of SBP Standard 1 – is implemented.

– The indicators that cannot be categorised as low risk are considered a specified risk.

For risk classification of indicators, two scopes, i.e. forests covered by the Forest Act and forests not covered by the Forest Act are used. This is because in some cases the risk profiles of these two classes of forests are different.

4 Stakeholder consultation

The draft RRA revision was shared with a total of 34 stakeholders in Denmark (see Annex 4) by email on 5 April 2023. The stakeholders were selected in such a way that all the interest groups[8] specified in SBP's Regional Risk Assessment Procedure (v1.2) were well represented. The draft was accompanied by a covering letter (see Annex 5). Stakeholders were requested to provide feedback within 30 calendar days which was 5 May 2023. A reminder was sent to stakeholders on 21 April 2023. Both the original request and the reminder were delivered to all stakeholders as no failure messages to the sender's email were received. Many stakeholders gave their feedback by phone. Online meetings and phone conversations were arranged with several stakeholders to obtain further clarification on their comments and feedback. A total of 17 stakeholders responded, which means the response rate was 50%. The detailed breakdown of stakeholders' responses is given in Table 4.1.

Among those who responded, 13 stakeholders made comments and four stakeholders (NOAH, WSP, the Danish Society for Nature Conservation and the Danish Outdoor Council) did not make any comments. A total of 10 stakeholders responded to the request to provide feedback on the revised draft RRA revision – nine gave comments and one did not.

8 The interest groups are economic, social, environmental, certification bodies, national forest agencies, universities and research institutions, and experts.

Table 4.1: Detailed breakdown of stakeholders' responses

Group	Request sent	Responded	Response rate %
	Number of stakeholders		
Industry (economic interest)	16	9	56
Regulator (social and environmental interest)	3	1	33
Civil society (social and environmental interest)	10	4	40
Certification body (social and environmental interest)	4	2	50
Academia and research	1	1	100
Total / overall	**34**	**17**	**50**

The second revised draft RRA revision for Denmark was prepared based on stakeholders' feedback (see Annexes 4 and 5). It was then shared with those stakeholders who provided feedback on the first draft for follow-up comments. A total of nine stakeholders responded and eight of them gave comments (Annex 5).

5 Conclusions

Based on the analysis carried out and the findings related to the indicators presented in Annex 1, it can be concluded that forests covered by the Danish Forest Act sub-scope generally represent a low-risk for wood-based feedstock sourcing for biomass production. Out of 42 indicators, 37 are assessed to be low risk and the remaining five as specified risk under this sub-scope.

Biomass production from forests not covered by the Danish Forest Act tends to be a little riskier as nine indicators under this sub-scope are assessed to be specified risk and 33 indicators to be low risk. Table 5.1 lists the risk classification proposed in the revised draft RRA revision report.

Table 5.1: Assigned risk classes for the indicators.

	Forests covered by Danish Forest Act		Forests not covered by Danish Forest Act	
Indicator	**Low Risk**	**Specified Risk**	**Low Risk**	**Specified Risk**
1.1.1	✓			✓
1.1.2	✓		✓	
1.1.3	✓		✓	
1.1.4	✓		✓	
1.1.5	✓		✓	
2.1.1		✓		✓
2.1.2		✓		✓
2.1.3		✓		✓
2.2.1	✓		✓	
2.2.2	✓			✓
2.2.3	✓		✓	
2.2.4	✓		✓	
2.2.5	✓		✓	
2.2.6	✓		✓	
2.2.7	✓		✓	
2.2.8	✓		✓	
2.2.9	✓			✓
2.2.10	✓			✓
2.2.11	✓		✓	
2.2.12	✓		✓	
3.1.1	✓		✓	
3.2.1	✓		✓	
3.2.2	✓		✓	
3.2.3		✓		✓
3.3.1	✓		✓	
4.1.1	✓		✓	
4.1.2	✓		✓	
4.1.3	✓		✓	
4.1.4	✓		✓	

4.1.5	✓		✓	
4.1.6	✓		✓	
4.1.7	✓		✓	
4.1.8	✓		✓	
4.1.9	✓		✓	
4.1.10	✓		✓	
4.2.1	✓		✓	
4.2.2	✓		✓	
4.2.3	✓		✓	
4.2.4	✓		✓	
4.2.5	✓		✓	
4.2.6	✓		✓	
4.2.7	✓		✓	

Annex 1 Detailed findings for Supply Base Evaluation

Principle 1 – Feedstock is legally sourced

Criterion 1.1 – Operators and operations are legal

Element	Description and analysis
1.1.1	**Operations related to feedstock sourcing and biomass production shall comply with all existing applicable laws and regulations.**
Findings	**Scale of assessment** The assessment covers all forests in Denmark. Operations related to feedstock sourcing and biomass production in Denmark are subject to Danish legislation and EU REDII. **Analysis** *National law and regulations concerning feedstock sourcing and biomass production* The Danish Forest Act – which covers about 70% of Denmark's forests – provides the main legislative framework for forestry in the country. As explained in Section 2.1, except for some exclusions, the Nature Protection Act covers 28% of the forests that are not covered by the Forest Act. However, as also mentioned in Section 2.1, the Danish Environmental Impact Assessment legislation (lov om miljøvurdering af planer og programmer og af konkrete projekter (VVM)) protects forests not covered by the Forest Act from being converted to agricultural land. The Environmental Objectives Act (Miljømålsloven) concerns harvesting in Natura 2000 areas. These Acts and legislation neither have any provision directly related to sourcing of forest-based feedstock (both primary feedstock and processing residues) and biomass production nor restrict the use of wood and forest biomass for bioenergy purposes. Regarding the feedstock supply base and mapping at the forest level, the main planning document – for the supply base in both public and private forests in Denmark – is the forest management plan. However, a forest management plan is not a legal requirement in Denmark for forests that are not Natura 2000 sites (Preferred by Nature 2017), and some smaller forest estates do not have management plans at all as opined by Sofie Tind Nielsen from WWF Denmark. Nevertheless, with government support in the form of subsidies given in several rounds (until 2016), many estates that would not otherwise have forest management plans (generally known as the Green Management Plans), now have them. From the above pieces of evidence, it can be concluded that the forest-based biomass feedstock used for bioenergy in the country is sourced in compliance with Danish legislation, namely the Forest Act, Environmental Impact Assessment legislation, the Environmental Objectives Act and the Nature Protection Act when they are applicable. It has to be remembered that 140,180 ha of forests in Denmark are not covered by either the Forest Act or the Nature Protection Act (based on data provided by Thomas Nord-Larsen, Forest and Landscape, Copenhagen University). This means that harvesting from these forests does not break any legislation as long as the harvested area is not converted to agriculture (as per the Environmental Impact Assessment legislation) or the area is not a Natura 2000 site. *Implementation of EU Renewable Energy Directive (REDII) in Denmark* The EU REDII (Article 29.6) imposes several requirements concerning the sustainability of forest biomass to be used for energy generation. The requirements concern: (i) the legality of harvesting operations

1.1.1 continued

Findings continued

(ii) forest regeneration of harvested areas

(iii) that areas designated by law or by the relevant competent authority for nature protection purposes are protected

(iv) that harvesting is carried out considering the maintenance of soil quality and biodiversity

(v) that harvesting maintains or improves the long-term production capacity of the forest.

With the Danish Forest Act, Nature Protection Act, and the Handbook (officially an executive order; Danish Energy Agency 2022a) that was first introduced in 2021 and amended in October 2022, Denmark fulfils the above requirements. As demonstrated below, the existing Danish legislation excluding the Handbook is not enough to fulfil the requirements.

Concerning requirement (i), as concluded in the above section, the forest-based feedstock used for producing biomass for energy in the country is sourced in compliance with the applicable Danish legislation.

Concerning requirement (ii), Article 8 of the Danish Forest Act states that tree stands cannot be felled before they have reached maturity and the area must meet the above requirements at the latest ten years after clearcutting. This implies that a harvested area (i.e. a clearcut) has to be regenerated. However, the Nature Protection Act does not have any direct provision for regeneration. This means that forests not covered by the Forest Act are not required by law to be regenerated after harvesting.

Regarding requirements (iii) and (iv), the purposes of the Forest Act (Article 1) and Nature Protection Act are to preserve, protect and enlarge the country's forests by specifying biodiversity conservation as one of the core objectives. Thus, the forests that are covered by these two Acts (see Section 2.1) fulfil requirements (iii) and (iv). However, about 22% of the country's forests (i.e. 140,180 ha) are not protected by either of the Acts and thus do not have any legal obligation to fulfil requirements (iii) and (iv) of the EU REDII.

Denmark's annual harvesting in recent years remains below the annual growth, implying the maintenance and improvement of the long-term production capacity of forests for timber, biomass for energy and other products. This means the requirement (v) is fulfilled for all forests.

In addition to the above, to help implement the EU REDII, Denmark enacted an executive order called 'Order on Handbook on the fulfilment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes'. This was the result of a political agreement in Denmark – that can be called as Climate Agreement on Energy and Industry – reached on 22 June 2020, that sets the legal requirement to implement the EU REDII in the country. The Handbook sets sustainability criteria for forest-based biomass feedstock (both primary feedstock and processing residues) originating from all sources within the country, i.e. forests covered by the Forest Act, and forests and tree-covered areas that are not covered by the Act.

The legal requirements of the Handbook – particularly Articles 5.2-5.7 – directly addressed the requirements (i) – (v) of EU REDII. However, the implementation of the Handbook is a requirement put on bioenergy producers (end users) with a capacity above 2.5 MW in Denmark. This means that only the defined bioenergy producers are required to comply with all requirements of the Handbook set to implement REDII in Denmark when sourcing forest-based biomass feedstock from forests.

The Danish Energy Agency monitors the bioenergy producers for compliance with the Handbook. Nora Skjernaa Hansen and Bo Larsen (experts working at the Danish Energy Agency) mentioned that the Agency did not find any major non-conformity in any bioenergy producers. They also opined that bioenergy producers of capacity 2.5 MW or below – who do not have to comply with the Handbook – together consume about 2% of the total biomass consumed in the country. These producers mainly use domestic biomass.

1.1.1 continued
Findings continued

The Handbook recognises that biomass contributes to reducing emissions when it comes from forestry residues. Where whole trunks from trees that are not replanted are used, the positive climate effect disappears. Therefore, the executive order sets legal requirements for the use of biomass for energy generation in Denmark.

A legal requirement[9] of the Handbook – to present a demonstrative case – specified that biomass must come from legally harvested trees and that felled trees must be replanted. According to Section 5.2 of the Handbook, a felled forest area must be regenerated in the same area according to national legislation that meets the requirements (i.e. Forest Act). The regeneration should be done according to management systems in the same area (Handbook, Section 5.3), which ensures that the area is not transferred to other uses. The requirement cannot be fulfilled by planting in other areas. The requirement is considered fulfilled if the forest is certified under a forest certification scheme that ensures re-establishment (i.e. regardless of whether the scheme in question is generally approved by the EU Commission or Danish Energy Agency).

For the forests not covered by the Forest Act, compliance with regeneration requirements must be documented according to Section 5.3.1 of the Handbook. The above means bioenergy producers (of capacity above 2.5 MW) cannot source biomass coming from a harvested area if the owner does not replant the area. This means all forests irrespective of their coverage by the Forest Act must be replanted if the feedstock is sourced by harvesting them to go to the bioenergy producers covered by the Handbook. This also means that while the Nature Protection Act and Environmental Impact Assessment legislation may not guarantee the regeneration after harvesting of forests not covered by the Forest Act, the Handbook for implementing EU REDII does so as long as these forests supply biomass to bioenergy producers of capacity above 2.5 MW.

There is a requirement that emissions in the production chain must be kept at a low level, and documentation of the sustainability of biomass is required. Violation of the rules will result in penalties.

Enforcement and monitoring

The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the Forest Act and Nature Protection Act. The Danish Energy Agency under the Ministry of Climate, Energy and Utilities enforces regulations related to energy. Regular monitoring of the enforcement is conducted and reported by the concerned agencies.

The municipalities are the authority on Natura 2000 areas outside the forests, VVM (EIA) areas and streams / water courses (both Nature Protection Act-regulated streams and streams governed by the water stream directives).

Risk conclusion and justification

Woody feedstock sourcing and biomass production from forests covered by the Forest Act for energy generation in Denmark – as the above analysis suggests – comply with the applicable national and EU-level laws and regulations. Regular monitoring of such laws and regulations is conducted and reported by designated authorities. However, there is a risk that forests that are not covered by the Forest Act can supply biomass to bioenergy producers of capacity 2.5 MW or below without complying with all EU REDII requirements. Therefore, it is concluded that the risk class for Indicator 1.1.1 is 'low risk' for forests covered by the Forest Act and 'specified risk' for forests not covered by the Forest Act.

9 The legal requirements replaced the voluntary industry agreement between the Danish Energy Association and the Danish District Heating Association reached in 2014 that regulated the sustainability of biomass for energy generation purposes.

1.1.1 continued *Means of verification*	– Relevant webpages of the Danish Nature Agency, Danish Environmental Protection Agency, Danish Environmental Agency, Ministry of Environment, Ministry of Climate, Energy and Utilities, the Danish Parliament, and European Commission – Statistics Denmark – Relevant Danish national and EU acts, laws and regulations
Evidence reviewed	– Danish Energy Agency. (2022a). Order on Handbook on the fulfilment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål). https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf – EU Renewable Energy Directive (RED) II – DIRECTIVE (EU) 2018/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL – of 11 December 2018 – on the promotion of the use of energy from renewable sources (europa.eu) – Forest Act (2019). https://www.retsinformation.dk/eli/lta/2019/315 – Nature Protection Act – https://www.retsinformation.dk/eli/lta/2013/951 – Political agreement on legal requirements for woody biomass (Opfølgende aftale ifm. Klimaftale for energi og industri mv.) on 2 October 2020. – Preferred by Nature. (2017). Timber legality assessment Denmark. Version 1.3. – Danish Environmental Impact Assessment Legislation (lov om miljøvurdering af planer og programmer og af konkrete projekter (VVM). (27.10.2021). https://www.retsinformation.dk/eli/lta/2021/1976 – Environmental Objectives Act. (26.01.2017). https://www.retsinformation.dk/eli/lta/2017/119 – Ministry of Environment: "Ophørte tilskudsordninger til skov- og natur". https://mst.dk/natur-vand/natur/tilskud-til-skov-og-naturprojekter/ophoerte-tilskudsordninger-til-skov-og-natur/.
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Specified risk**
1.1.2	**Legal ownership of land and resource use rights shall be respected.**
Findings	**Scale of assessment** Woody feedstock in Denmark is sourced from both publicly and privately owned forests and tree-covered areas. **Analysis** Land tenure rights are regulated by the Land Registration Law, with land ownership registered in the Land Book (Land Registration Law 2014; The Land Registry: "The Land Book"). According to the Land Registration Law, rights to real estate must be registered in the Land Book to manage cases of prosecution and to ensure valid agreements on property. When a land registration document is to be registered, it shall include details of the land registry number and address, personal identification number and company registration number. Apart from registration in the Land Book, a legal contract of ownership shall also be signed.

1.1.2 continued *Findings continued*	Customary rights and legal methods to obtain rights are equally regulated by the Land Registration Law. The Land Book is an online registry that is publicly available (Land Registry: "The Land Book"). Moreover, OIS.dk and arealinformation.dk provide important information regarding legal ownership and land use as well as insights on high level public information. According to the Danish Forest Association, Denmark is one of the most highly organised countries in the context of spatial mapping, especially the forest area. Ownership is very clear, and there are very few areas without clearly defined ownership. The Danish Forest Association does not know of any risks related to ownership. The State's right to obtain land tenure is regulated through the Expropriation Law (see Danish Forest Association: "The Danish Forest Association"). All legally registered companies are registered in the CVR register from which information on the type of business, size, address etc. is publicly available (Danish Business Authority: "Danish Central Company Register"). The CVR number can be verified in the registry. A legal business agreement is also a requirement. Legal ownership and land use can be demonstrated by reviewing the Land Book or the online registration. Rights are clearly established in Denmark and business and tax registrations are clear and transparent through public databases. Furthermore, laws in Denmark are very well enforced. In the Corruption Perceptions Index 2022, Denmark ranks the first, i.e. the least corrupt country among 180 countries evaluated (Denmark – Transparency.org). As a matter of fact, the country ranked either first or second for the years 2012-2021 (Transparency International 2021). Within the World Bank Worldwide Governance Indicators index, Denmark scores very high for the Rule of Law and Control of Corruption (World Bank: "Worldwide Governance Indicators"). This indicates that there is a very low risk that legislation on ownership and legal registration of businesses is not enforced. **Enforcement and monitoring** The Land Book is publicly available online and is updated regularly. The Danish Geodata Agency is responsible for providing geodata about land and sea in the country. The Danish Cadastre Office under the Danish Geodata Agency maintains and regularly updates a country-wide cadastral map, an official register and a cadastral archive. These are the basis of all land registration and thus play a central role in the public management and administration of land ownership in Denmark. **Risk conclusion and justification** Based on the available information, the risk for this Indicator has been assessed as Low for both forests covered by the Forest Act and forests not covered by the Forest Act.
Means of verification	– Websites of Danish Geodata Agency and Danish Cadastre Office – Existing legislation – Relevant registries – Relevant data from non-governmental organisations and financial organisations

Annex 1 Detailed findings for Supply Base Evaluation continued

1.1.2 continued *Evidence reviewed*	– Danish Business Authority: "Danish Central Company Register". https://datacvr.virk.dk/ – Danish Geodata Agency: "Danish Cadastre Office". https://eng.gst.dk/danish-cadastre-office – Danish Forest Association: "The Danish Forest Association". https://www.danskskovforening.dk/english/ – Danish Geodata Agency: "Home". https://gst.dk/ – Land Registration Law (30.9.2014). https://www.retsinformation.dk/eli/lta/2014/1075 – Land Registry. "The Land Book". https://www.tinglysning.dk/tinglysning/landingpage/landingpage.xhtml – The World Bank Worldwide Governance Indicators: Worldwide Governance Indicators | DataBank (worldbank.org) – Transparency International (2021). "Corruption Perceptions Index 2021". https://www.transparency.org/en/cpi/2021 – Transparency International, Country profile for Denmark: http://www.transparency.org/country/#DNK – World Bank. "Worldwide Governance Indicators". https://databank.worldbank.org/source/worldwide-governance-indicators – OIS.dk – arealinformation.dk
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
1.1.3	**Feedstock shall be legally harvested, supplied and produced, including in compliance with CITES, EUTR and other applicable legal trade requirements.**
Findings	**Scale of assessment** Woody feedstock harvesting, production and sourcing in Denmark are regulated by both national and EU-level legislation. The EU Timber Regulation (EUTR) is the main applicable trade framework for assuring the legality of feedstock in the country. **Analysis** As discussed in relation to Indicator 1.1.1 in Annex 1, woody feedstock harvesting, supply and production are fully compliant with the relevant legislation. The Danish forestry-related legislation relevant to EUTR is comprehensive and detailed and regulates numerous aspects including maintaining the forest area, protecting Natura 2000 areas and general protection of the environment. The Danish Environmental Protection Agency is the competent authority on the implementation of the EUTR in Denmark, including in the Danish forestry context. The forest owner guidance document published in 2016 lists the applicable legislation, gives examples of cases and includes a requirement that forest owners implement a due diligence system, so they can document that they comply with relevant legislation (The Ministry of Environment and Food 2016).

1.1.3 continued *Findings continued*	The executive order on trade in wood and wood products to combat the trade in illegally harvested timber establishes the regulation required to support the EUTR (Act on the Administration 2012). The regulation describes administrative decisions and penalty provisions. The legislation requires that all companies who are placing wood on the market shall have a due diligence system in place, do not trade in illegally harvested wood, and be able to identify the companies one step up and one step down the market chain. According to interviewed representatives of the Danish Environmental Protection Agency, the enforcement of forest legislation in Denmark has been at a moderate level over the past decades since routine visits by government officials to forest owners ended in the mid-1980s. Since then, the enforcement of forest legislation has focused on reported cases of violations of relevant laws. There are a number of cases annually of reported violations of relevant laws but, according to the officials, the violations are not generally systematic, grave or motivated by economic gain. Typical cases include not seeking a permit before otherwise acceptable felling activities in Natura 2000 areas, illegal construction of hunting cabins or non-payment of VAT for sales of firewood to private buyers. The Danish Environmental Protection Agency confirms that for legislation governed by the Agency (Forest Act and EU Timber Regulation), the number of violations recorded annually is very low. There are no tree species classified as CITES species in Denmark and thus the CITES regulation is not applicable here. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the Forest Act, Nature Protection Act and EUTR. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** As the feedstock harvesting, production and sourcing in Denmark are fully compliant with the applicable domestic legislation and EUTR, the risk class for this indicator is assessed as low for both forests covered by the Forest Act and forests not covered by the Forest Act.
Means of verification	**EUTR** – Existing legislation – Webpage of the Danish Nature Protection Agency – Interviews demonstrate that key staff has a good knowledge of relevant forestry legislation **CITES** – CITES Appendices I, II and III
Evidence reviewed	**EUTR** – Act on the Administration of the European Union Regulations on Trade in Timber and Timber Products with a View to Combating Trade in Illegally Logged Timber (Lov om administration af Den Europæiske Unions forordninger om handel med træ og træprodukter med henblik på bekæmpelse af handel med ulovligt fældet træ). (18.12.2012). https://www.retsinformation.dk/Forms/R0710.aspx?id=144423 – Danish Energy Agency. (2022a). Order on Handbook on the fulfilment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål). https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf

1.1.3 continued *Evidence reviewed*	– Environmental Protection Act. (19.01.2022). https://www.retsinformation.dk/eli/lta/2022/100 – Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Ministry of Environment and Food. (2016). "Guidance for Danish Forest Owners on the EUTR" (Vejledning til danske skovejere om EU´s Tømmerforordning (EUTR). – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Ochre Act. (10.12.2015). https://www.retsinformation.dk/eli/lta/2015/1581 – Watercourse Act. (25.11.2019). https://www.retsinformation.dk/eli/lta/2019/1217 **CITES** – CITES Appendices I, II and III: (https://cites.org/sites/default/files/eng/app/2016/E-Appendices-2016-03-10.pdf) – Wikipedia, List of Trees of Denmark (https://en.wikipedia.org/wiki/List_of_trees_of_Denmark)
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
1.1.4	**Payments for harvest rights and feedstock, including duties, relevant royalties and taxes related to timber harvesting shall, be complete and up to date.**
Findings	**Scale of assessment** Only VAT applies to timber and feedstock harvesting from all forests in Denmark. **Analysis** Royalties or timber harvesting taxes are not implemented in Denmark, and thus not relevant. A VAT rate of 25% shall be paid in accordance with the VAT Law (VAT Law 2021). Value Added Tax shall be paid on a six-month, three-month, or monthly basis depending on company turnover and is administered by the Ministry of Taxation through the Danish Tax Agency and applies to persons who conduct an independent business. **Enforcement and monitoring** Regulation of sales tax and VAT is considered to be well enforced in Denmark by the Danish Tax Agency and there are no indications that feedstock enters the biomass supply chain under violation of VAT legislation. **Risk conclusion and justification** The risk associated with lack of payment of VAT in relation to feedstock for biomass production – based on the analysis above – can be considered low for both forests covered by the Forest Act and forests not covered by the Forest Act.
Means of verification	– Sales invoice – Transport documents – Website of Danish Tax Agency

Annex 1 Detailed findings for Supply Base Evaluation continued

1.1.4 continued *Evidence reviewed*	– Danish Tax Agency: "Danish Tax Agency". https://www.sktst.dk/english/ – Ministry of Environment and Food. (2016). "Guidance for Danish Forest Owners on the EUTR" (Vejledning til danske skovejere om EU´s Tømmerforordning (EUTR). – VAT Law (Momsbekendtgørelsen) (30.11.2021). https://www.retsinformation.dk/eli/lta/2021/2246
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
1.1.5	**There shall be adequate protection of the Supply Base from unauthorised and illegal activities, such as illegal logging, mining, and encroachment.**
Findings	**Scale of assessment** Woody feedstock harvesting, production and sourcing from all forests in Denmark are regulated by both national and EU-level legislation. **Analysis** In general, there is a high level of law enforcement in Denmark. Illegal logging and encroachment are not issues in Denmark. The forest governance portal of the Chatham House, UK – which monitors illegal logging globally – does not record any illegal logging activities in Denmark (Chatham House 2023). Also, as forests are so small and forest activities are in most cases visible to the public and forest management staff from roadside. The types of illegal activities most commonly encountered in Denmark are illegal littering, stray dogs, unauthorised mountain biking, theft of firewood and, occasionally, poaching. Illegal or unauthorised activities in Danish forests generally have limited economic or biological impact. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above analysis it can be concluded that the risk from unauthorised activities in Danish forests is low and thus this indicator is assigned low risk for both forests covered by the Forest Act and forests not covered by the Forest Act.
Means of verification	– Monitoring records – Interviews with staff – Interviews with stakeholders – Publicly available information (news and media).

Annex 1 Detailed findings for Supply Base Evaluation continued

Evidence reviewed	– Chatham House. 2023. "Forest Governance and Legality". https://forestgovernance.chathamhouse.org/ – Transparency International. "Denmark". https://www.transparency.org/en/countries/denmark – World Bank. "Worldwide Governance Indicators". https://databank.worldbank.org/source/worldwide-governance-indicators
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

Principle 2 – Feedstock sourcing does not harm the environment

Criterion 2.1 – Biodiversity is maintained or enhanced

Element	Description and analysis
2.1.1	**Key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be identified.**
Findings	**Scale of assessment** The scale of assessment covers all forests in Denmark. **Analysis** Status of HCV, habitats and ecosystems, and their identification and mapping. Danish forests have been surveyed by the Department of Geosciences and Natural Resource Management at Copenhagen University using a sampling methodology and documented under the Danish National Forest Inventory (NFI) hosted by The Danish Environmental Protection Agency. Danish forests have been well researched and most areas – particularly larger ones – with significant conservation values have been identified. These areas are mapped and available to the public through the website Danmarks Miljøportal (The Ministry of Environment, "Danmarks Miljøportal"). While significant and important HCV areas critical to conservation are designated as protected areas at the national or EU level (Natura 2000), consultation with experts and stakeholders suggests that there are very likely to be a large number of smaller areas or biotopes of local or regional importance to biodiversity or species habitats. In a Danish context, these are called Key Biotopes ("nøglebiotoper"). These areas are not systematically identified and mapped. Further identification of 'forests containing particular natural values' is a goal of the Danish Forest Act (Article 25) (Forest Act 2019). The registration under Article 25 of the Forest Act in private forest areas has been initiated in 2022. This registration is being carried out for both fredskov and forests covered by the Nature Protection Act and is expected to finish in 2024 (Ministry of Environment: "Kortlægning af naturmæssigt særlig værdifuld skov – § 25 skov"). The publication of the registered areas (including maps) is expected in 2025. When this registration is completed, it will contribute significantly to the identification of key species, habitats, ecosystems, and areas of HCV pertaining to biodiversity in Denmark. However, mainly the larger ecosystem and forest types are currently being mapped. In Denmark, 194,890 ha of forests remain outside of the fredskov and are not covered by the Forest Act. Only 54,710 ha (28%) of the forests that are not covered by the Forest Act are protected by the Nature Protection Act. This means 140,180 ha of forests in Denmark are covered by neither the Forest Act nor the Nature Protection Act (source: Thomas Nord-Larsen from Forest and Landscape, Copenhagen University). Consultation with stakeholders reveals that all small biotopes, i.e. lakes, bogs, heaths, salt marshes or beach swamps, fresh meadows, and biological grasslands located in the forests that remain outside the coverage of the Forest Act and theNature Protection Act, are not systematically identified and mapped. The HCV categories 1–4 are related to ecosystems and biodiversity for the assessment under this indicator and are defined below. **HCV 1:** This category refers to – according to the FSC National Forest Stewardship Standard of Denmark (FSC 2018) – the areas with concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels. In the Danish context, all living / breeding / resting areas, conservation-reliant and red-listed plant and animal species are covered by this category (FSC 2018).

2.1.1 continued

Findings continued

HCV 2: This refers to ecosystems at the landscape level and mosaics of ecosystems, i.e. practically large woodland territories: not relevant for Denmark according to FSC's HCV 2 definition (FSC 2018) as Denmark does not contain these types of forests.

HCV 3: This category includes rare, threatened or endangered ecosystems, habitats or refugia (FSC 2018). In a Danish context, according to FSC (2018), this category is covered by Natura 2000 areas, areas covered by the Nature Conservation Act (Article 3), other protected areas as well as identification of Key Biotopes (Nøglebiotoper) larger than 0.25 ha. Natura 2000 areas are aligned with the European Commission's Habitats and Birds Directives and contain Woodland Key Habitats (WKH), protected habitats conserved under the Nature Conservation Act (Article 3), and the Forest Act (Articles 25, 26 and 27).

Other protected areas and key habitats such as protected lakes, streams, moors, marshes, salt marshes, fresh meadows and grasslands are conserved under the Nature Conservation Act (Article 3); and Oak shrub forests are preserved under the Forest Act (Article 26). Deciduous forest boundary areas are protected under the Forest Act (Article 27). Natura 2000 areas and protected areas are completely mapped but there is currently no legal requirement for mapping of areas covered by the Forest Act Articles 27 to 28 nor for the identification and mapping of Key Biotopes.

HCV 4: This category includes areas providing basic ecosystem services in critical situations including protection of water catchments and control of erosion of vulnerable soils and slopes. In the Danish context, this covers areas with high protection value for drinking water and groundwater (FSC 2018). Natura 2000 areas, Nature Protection Act (Article 3), other protected areas and "near-well protected areas" (Boringsnære Beskyttelsesområder – BNBO) which describe the protected area surrounding a water source (a well) are areas with important water protection values (Brown et al. 2013).

HCVs including key habitats, species and ecosystems have been identified and mapped in all Danish forests that that have received government subsidies for the development of a so-called 'green management plan'. A requirement for the payment of the subsidy is that HCVs are identified, mapped and incorporated into the green management plan. The green management plan contains a register and plans for the protection of HCVs.

There is still a significant portion of forests that do not have a green management plan. There is no public register of forests that have a green management plan nor are there any requirements that the HCVs identified and mapped in the green management plans are made public. Consultation with WWF Denmark suggests that the identification and registration of HCVs in the green management plan does not follow FSC guidelines for HCV registration and that no authority or NGO controls the process of identification and registration of HCVs in forests with green management plans.

As mentioned above, the identification and mapping of 'forests containing particular natural values' as per the Danish Forest Act (Article 25) are ongoing and expected to be concluded in 2024. Since the maps are still being developed, these cannot currently be used for the protection of HCVs when planning feedstock sourcing.

Source types and their risk levels

There can be different "source types" i.e. sources of biomass feedstock that share properties with regard to the presence, mapping and protection of HCVs, including Key biotopes and biodiversity in a broader sense. The following source types are defined and their risk levels assessed:

1. **Feedstock originating from FSC or PEFC-certified forests:** According to the benchmarking and recognition of SBP requirements against other certification systems, FSC certified forests fully meet the requirements of Indicator 2.1.1 while PEFC international forest management standard only partially meets the requirements. However, PEFC National Standard for Denmark - as evidenced by PEFC DK 001-4 – PEFC Danmarks skovstandard – covers key species, habitats, ecosystems, and areas of high conservation value and requires their mapping. Therefore, the risk is evaluated as low for both FSC and PEFC certified forests in Denmark.

2.1.1 continued *Findings continued*	2. **Feedstock originating from forest estates with a green management plan:** It is a requirement for receiving subsidies for developing a green management plan that HCV areas in the forest are identified and mapped. Green management plans contain a register and plan for the protection of HCVs. Risk is evaluated as low. 3. **Feedstock from harvesting in even-aged stands of conifers:** Based on feedback from several stakeholders and key experts, it is concluded that the risk of key biotopes being under threat from thinning operations in even-aged conifers in Danish forests is low. However, expert consultation suggests that for old growth (more than 90 years) even-aged coniferous stands of native species (Pinus sylvestris), the risk is assessed as specified. 4. **Feedstock from thinning in first-generation afforestation areas:** Based on feedback from several stakeholders and key experts, it is concluded that the chance of key biotopes being under threat from thinning operations in first-generation afforestation areas and taking into account the existing mapping of other HCV categories, the risk is assessed as being low. 5. **Feedstock from uneven-aged stands or stands of broadleaf species:** Due to there being no legal requirement for the identification and mapping of key biotopes, biomass sourcing from this type of stand is assessed to be a specified risk. It should also be noted here that bioenergy producers of capacity over 2.5 MW, are required to comply with all requirements of the Handbook set to implement REDII in Denmark when sourcing forest-based biomass feedstock from forests. Two of the requirements are to ensure nature protection and biodiversity conservation while sourcing biomass by the defined energy producers. Nature protection and biodiversity conservation require the identification of key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base. However, bioenergy producers of capacity below 2.5 MW – being outside the scope of the Handbook – are not obliged to ensure nature protection and biodiversity conservation while sourcing biomass. Therefore, this is a risk for this indicator regarding biomass sourcing by these producers. **Risk conclusion and justification** Based on the evidence provided above, it is concluded that there is a specified risk that at least locally-important key biotopes in forests have not yet been identified and mapped so may therefore be at risk from threats due to the sourcing of biomass.
Means of verification	– Desktop search – Interviews – GIS / Aerial maps of HCV areas – Regional, publicly available data from a credible third party – The existence of a strong legal framework in the region
Evidence reviewed	– Brown, E., N. Dudley, A. Lindhe, D.R. Muhtaman, C. Stewart, and T. Synnott (eds). 2013 (October). Common Guidance for the Identification of High Conservation Values. HCV Resource Network. – Danish Society for Nature Conservation: "Interactive map of protected areas". http://www.fredninger.dk/ – Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Ministry of Environment: "Danmarks Miljøportal". http://arealinformation.miljoeportal.dk/distribution/

2.1.1 continued *Evidence reviewed continued*	– Ministry of Environment: "The Digital Nature Map 2021 incl. the Biodiversity map" (De Digitale Naturkort 2021 inkl. Biodiversitetskortet). http://miljoegis.mim.dk/cbkort?profile=miljoegis-plangroendk – Nature Agency (2015). Rules for subsidies for Green Management Plans (Bæredygtig skovdrift. Vejledning om tilskud til grøn driftsplan) – FSC. (2018). FSC National Forest Stewardship Standard of Denmark. Copenhagen. – Ministry of Environment: "Kortlægning af naturmæssigt særlig værdifuld skov – § 25 skov"[10]. https://mst.dk/erhverv/skovbrug/naturmaessigt-saerlig-vaerdifuld-skov-25-skov/ – PEFC Denmark. 2022. PEFC DK 001-4 – PEFC Danmarks skovstandard. Available at https://www.pefc.dk/nyheder/den-nye-pefc-skovstandard-er-blevet-vedtaget (last sighted on 19 March 2024).
Risk rating	**Forests covered by Danish Forest Act: Specified risk** **Forests not covered by Danish Forest Act: Specified risk**
2.1.2	**Threats to and impacts on the identified key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be identified and evaluated.**
Findings	**Scale of assessment** The scale of assessment covers all forests in Denmark. **Analysis** Source types and their risk levels. There can be different "source types" i.e. sources of biomass feedstock that share properties with regard to the presence, mapping and protection of HCVs, including key biotopes and biodiversity in a broader sense, the following source types are defined, and their risk levels assessed: 1. **Feedstock originating from FSC- or PEFC-certified forests:** According to the benchmarking and recognition of SBP requirements against other certification systems, FSC-certified forests fully meet the requirements of Indicator 2.1.2 while PEFC international forest management standard only partially meets the requirements. However, PEFC National Standard for Denmark - as evidenced by PEFC DK 001-4 – PEFC Danmarks skovstandard- covers key species, habitats, ecosystems, and areas of high conservation value and requires their mapping. Therefore, the risk is evaluated as low for both FSC and PEFC certified forests in Denmark. 2. **Feedstock originating from forest estates with a green management plan:** It is a requirement for receiving subsidies for developing a green management plan that HCV areas in the forest are identified and mapped (The Nature Agency 2015). Risk is evaluated as low. 3. **Feedstock from harvesting in even-aged stands of conifers:** Based on feedback from several stakeholders and key experts, it is concluded that the risk of key biotopes being under threat from thinning operations in even-aged conifers in Danish forests is low. However, expert consultation suggests that for old growth (more than 90 years) even-aged coniferous stands of native species (Pinus sylvestris), the risk is assessed as specified. 4. **Feedstock from thinning in first-generation afforestation areas:** Based on feedback from several stakeholders and key experts, it is concluded that the chance of key biotopes being under threat from thinning operations in first-generation afforestation areas and taking into account the existing mapping of other HCV categories, the risk is assessed as being low.

10 See Natural particularly valuable forest – § 25 forest (mst.dk).

2.1.2 continued *Findings continued*	5. **Feedstock from uneven-aged stands or stands of broadleaf species:** Due to there being no legal requirement for the identification and mapping of key biotopes, biomass sourcing from this type of stand is assessed to be a specified risk. It can be noted here that the registration of areas under Article 25 of the Forest Act is ongoing and expected to be complete in 2024 with maps being available in 2025 (see Indicator 2.1.1). As discussed in Indicator 2.1.1, bioenergy producers of capacity below 2.5 MW – being outside the scope of the Handbook for implementing EU REDII in Denmark – are not obliged to ensure nature protection and biodiversity conservation while sourcing biomass. Therefore, this is a risk for this indicator regarding biomass sourcing by these producers. **Risk conclusion and justification** Based on the above analysis, it can be concluded that threats to and impacts on the identified key species, habitats, ecosystems, and areas of HCV pertaining to biodiversity cannot be identified and evaluated in all forests irrespective of their coverage by the Forest Act. Therefore, the risk class for this indicator is assessed as specified for all forests.
Means of verification	– FSC or PEFC Forest Management certificate – Green management plan and map of HCVs – Forest Management plan – Regional Best Management Practices – Standard Operating Procedures – Codes of Practice – Records of BP field inspections – Monitoring records – Interviews with staff – Publicly available information on the protection of the values identified – Regional, publicly available data from credible third parties – The existence of a strong legal framework in the region
Evidence reviewed	– Ministry of Environment: "The Digital Nature Map 2021 incl. the Biodiversity map" (De Digitale Naturkort 2021 inkl. Biodiversitetskortet). http://miljoegis.mim.dk/cbkort?profile=miljoegis-plangroendk – Nature Agency. (2015). Rules for subsidies for Green Management Plans (Bæredygtig skovdrift. Vejledning om tilskud til grøn driftsplan) – FSC. (2018). FSC National Forest Stewardship Standard of Denmark. Copenhagen. – Ministry of Environment: "Kortlægning af naturmæssigt særlig værdifuld skov – § 25 skov". https://mst.dk/erhverv/skovbrug/naturmaessigt-saerlig-vaerdifuld-skov-25-skov/ – PEFC Denmark. 2022. PEFC DK 001-4 – PEFC Danmarks skovstandard. Available at https://www.pefc.dk/nyheder/den-nye-pefc-skovstandard-er-blevet-vedtaget (last sighted on 19 March 2024).

Annex 1 Detailed findings for Supply Base Evaluation continued

2.1.2 continued *Risk rating*	**Forests covered by Danish Forest Act: Specified risk** **Forests not covered by Danish Forest Act: Specified risk**
2.1.3	**Key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be maintained or enhanced.**
Findings	**Scale of assessment** The scale of assessment covers all forests in Denmark. **Analysis** This indicator – as also pointed out by the stakeholders – is interlinked with indicators 2.1.1 and 2.1.2. As noted in the analysis of those two indicators, there are still many unmapped and unidentified HCV areas within the Danish forests. This means that there are unassessed threats connected to these unmapped and unidentified HCV areas as consultation with stakeholders confirms. This is particularly true for old-growth even-aged coniferous stands of native species (Pinus sylvestris), and uneven-aged stands or stands of broadleaved species. Without assessing the threats, it is hard to maintain or enhance key species, habitats, ecosystems, and HCV in these areas. It can be recognised that when the registration of Article 25-areas is complete in 2024 and maps are published in 2025, maintaining many of these areas will become easier. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above analysis, the risk for this Indicator is assessed as specified for both forests covered by the Forest Act and forests not covered by the Forest Act.
Means of verification	– Regional Best Management Practices – Supply contracts – Assessment of potential impacts at the operational level and of measures to minimise impacts – Monitoring results – Publicly available information on the protection of the identified values – Applicable legislation and level of enforcement – Regional, publicly available data from a credible third party
Evidence reviewed	– Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Ministry of Environment: "Danmarks Miljøportal". http://arealinformation.miljoeportal.dk/distribution/ – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392

2.1.3 continued *Evidence reviewed continued*	– Danish Environmental Impact Assessment Legislation (lov om miljøvurdering af planer og programmer og af konkrete projekter (VVM)). (27.10.2021). https://www.retsinformation.dk/eli/lta/2021/1976 – Ministry of Environment: "Kortlægning af naturmæssigt særlig værdifuld skov – § 25 skov". https://mst.dk/erhverv/skovbrug/naturmaessigt-saerlig-vaerdifuld-skov-25-skov/
Risk rating	**Forests covered by Danish Forest Act: Specified risk** **Forests not covered by Danish Forest Act: Specified risk**

Criterion 2.2 – Ecosystem productivity, functions, and services are maintained or enhanced

Element	Description and analysis
2.2.1	**Feedstock shall not be sourced from land that had one of the following statuses in January 2008 and no longer has that status due to land conversion: a. Forests b. Wetlands c. Peatlands d. Highly biodiverse grasslands.**
Findings	**Scale of assessment** Most forests in Denmark today are the result of afforestation projects occurring over the last 200 years since the forest cover was at its lowest in the early 19th century. Additionally, most forests in Denmark have been under some form of forest management. **Analysis** The Danish Forest Act (Article 8) states that areas covered by the Forest Act must support trees that are expected to form a full-height stand with a closed canopy (Forest Act 2019). The same article also states that tree stands cannot be felled before they have reached maturity and the area must meet the above requirements at the latest by ten years after clearcutting. Article 9 of the Forest Act contains a provision to use – for grazing and coppicing – up to 10% of the forest area protected by the Act. This also includes the use of forest land for Christmas tree production or short rotation poplar for biomass purposes. This means that up to 10% of the area protected by the Forest Act can legally be converted to short-rotation production stands of Christmas trees or poplar for feedstock purposes. With this, it is realistic to assume that some such conversion may have taken place since January 2008. There is, however, no evidence of significant conversion of forest areas from a natural or near-natural state to productive forest plantations after January 2008. Rather, a limited area of forests has been cleared for gravel digging and residential buildings and the establishment of forest plantations elsewhere as an offset is not very common in Denmark. Moreover, there is no evidence that since January 2008, peatlands, wetlands and highly biodiverse grassland have been converted on any notable scale to productive forest plantations from which feedstock can be sourced. A consultation with Nora Skjernaa Hansen and Bo Larsen (experts working at the Danish Energy Agency) suggests that the conversion of natural areas, such as bogs and heaths, has been prohibited in Denmark since 1992. It can be also noted here that Danish Environmental Impact Assessment legislation prohibits the conversion of forests not covered by the Forest Act into agricultural uses. According to Sections 5.2 and 5.3 of the Handbook of the Danish Energy Agency for implementing EU REDII, a felled forest area must be regenerated according to applicable management systems in the same area level, which ensures that the area is not converted to another use. The requirement cannot be fulfilled by regenerating in other areas.

2.2.1 continued *Findings continued*	**Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above analysis, there is no evidence that since January 2008 forests, peatlands, wetlands and highly biodiverse grassland have been converted to productive forest plantations from where feedstock can be sourced. Therefore, it is concluded that the risk class for this indicator is low for both forests covered by the Forest Act and forests not covered by the Forest Act.
Means of verification	– National forest inventory – Historical maps – Regional, publicly available data from a credible third party – The existence of a strong legal framework in the region – Records of BP field inspections – Monitoring records – Expert interviews – Aerial photos are available from 1954, 1995 and later at: http://miljoegis.mim.dk/spatialmap?
Evidence reviewed	– FAO. "Definitions Related to Planted Forests". http://www.fao.org/docrep/007/ae347e/ae347e02.htm – Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/31 – Global Forest Watch. "Country Profile for Denmark". GFW: Denmark – Nord-Larsen, T., Johannsen, V. K., Riis-Nielsen, T., Thomsen, I. M., Bentsen, N. S., Jørgensen, B. B. (2023). Skovstatistik 2021. Institut for Geovidenskab og Naturforvaltning. 60 s. – Danish Environmental Impact Assessment Legislation (lov om miljøvurdering af planer og programmer og af konkrete projekter (VVM)). (27.10.2021). https://www.retsinformation.dk/eli/lta/2021/1976 – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Danish Energy Agency. (2022a). Order on Handbook on the fulfilment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål). https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

2.2.2	**Ecosystems, their health, vitality, functions and services in the Supply Base shall be maintained or enhanced.**
Findings	**Scale of assessment** The scale of assessment covers all forests in Denmark. **Analysis** The Danish Forest Act (Article 14-24) establishes legal protection of key ecosystems and habitats and thus their health, functions, vitality, and services in the fredskov (i.e. 70% of the total forests in Denmark) (Forest Act 2019; The Ministry of Environment, "Danmarks Miljøportal"). The Danish Nature Protection Act offers provisions for the protection of nature, wild animals and plants and their habitats as well as for the improvement, creation and restoration of wildlife and cultural sites and for providing public access to the wild. It covers all habitats including forests, wetlands, bogs, grasslands, and tree-covered areas. Overall, the Nature Protection Act provides protection and thus helps maintain or enhance the ecosystems, their health, vitality, functions and services in total 83,129 ha of forests: 28,419 ha of fredskov (thus covered by the Forest Act) and 54,710 ha of non-fredskov (out of total of 194,890 ha in Denmark) [source: Data underlying the Danish NFI (Nord-Larsen et al., 2023)] including the individual protected areas (Nature Protection Act, Article 3). In addition, the Natura-2000 designated areas, i.e., key ecosystems and habitats are mapped, protected and / or preserved in their natural state. The biomass producers – as per stakeholder consultation – must implement a procedure that ensures that the already mapped areas are maintained or improved. The above analysis suggests that forests covered by the Forest Act, Natura 2000 areas and individual protected areas – as they are mapped, protected and / or preserved in their natural state – are sufficiently maintained and also enhanced in Denmark. Therefore, sourcing feedstock for biomass does not pose a threat to these areas. It should be noted here that the ongoing registration of areas under Article 25 of the Forest Act is likely to contribute to the much-needed mapping and knowledge of ecosystems and habitats outside Natura 2000 areas particularly many of the key biotopes whereby targets to enhance biodiversity can be increased. However, 140,180 ha of forests in Denmark are covered by neither the Forest Act nor the Nature Protection Act (source: Thomas Nord-Larsen from Forest and Landscape, Copenhagen University). Consultation with stakeholders reveals that examples of all small biotopes, i.e. lakes, bogs, heaths, salt marshes or beach swamps, fresh meadows, and biological grasslands are to be found located in forests that are covered neither by the Forest Act nor by the Nature Protection Act so are not systematically identified and mapped. Therefore, these areas can be considered to have a specified risk. As discussed earlier in this RRA, bioenergy producers of a capacity below 2.5 MW – being outside the scope of the Handbook for implementing EU REDII in Denmark – are not obliged to ensure nature protection and biodiversity conservation while sourcing biomass. Therefore, this is a risk for this indicator regarding biomass sourcing by these producers from forests not covered by the Forest Act and Nature Protection Act. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies.

2.2.2 continued *Findings continued*	**Risk conclusion and justification** Based on the above analysis, forests covered by the Forest Act have low risk, while forests not covered by the Forest Act have specified risks.
Means of verification	– Danmarks Miljøportal: http://arealinformation.miljoeportal.dk/distribution/ – Interactive map of protected areas: http://www.fredninger.dk/ – The Digital Nature Map – The Biodiversity map of Denmark – National forest inventory
Evidence reviewed	– Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Johannsen, V. K., Dippel, T., Friis Møller, P., Heilmann-Clausen, J., Ejrnæs, R., Larsen, J. B., Hansen, G. K. (2013). Evaluering af indsatsen for biodiversiteten i de danske skove 1992-2012. Institut for Geovidenskab og Naturforvaltning, Københavns Universitet. http://ign.ku.dk/formidling/publikationer/rapporter/filer-2013/evaluering-biodiversitet-1992-2012.pdf – Johannsen, V.K., Rojas,S.K., Brunbjerg, A.K., Schumacher, Bladt, J., Nyed, Moeslund, J.E., Nord-Larsen, T. og Ejrnæs, R. (2015). Udvikling af et High Nature Value – HNV-skovkort for Danmark. IGN Rapport November 2015, Institut for Geovidenskab og Naturforvaltning, Københavns Universitet, Frederiksberg – Ministry of Environment: "Danmarks Miljøportal". http://arealinformation.miljoeportal.dk/distribution/ – Ministry of Environment: "The Digital Nature Map 2021 incl. the Biodiversity map" (De Digitale Naturkort 2021 inkl. Biodiversitetskortet). http://miljoegis.mim.dk/cbkort?profile=miljoegis-plangroendk – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Nord-Larsen, T., Johannsen, VK., Riis-Nielsen, T., Thomsen, I. M., & Jørgensen, B. B. (2023). Skovstatistik 2021. Institut for Geovidenskab og Naturforvaltning, Københavns Universitet.
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Specified risk**

2.2.3	**Soil quality in the Supply Base shall be maintained or enhanced.**
Findings	**Scale of assessment** The scale of assessment covers all forests in Denmark. **Analysis** The effects of logging practices and extraction of biomass from forests on the soil and ecosystem nutrient pool in different parts of Denmark have been analysed through research projects over significant periods for both nutrient-poor and nutrient-rich soils. Leaves / needles and bark contain most of the nutrients in the trees (N, P, K and Ca). The common practice in Denmark when chipping feedstock for biomass is to leave the branches and top ends in the forest for pre-drying for several months until leaves or needles are shed and left behind in the stand, and before carrying out the chipping. Studies show that this practice significantly minimises plant nutrient loss compared to methods where leaves and needles are removed from the stands. Even with an increase in biomass production, the practice of leaving leaves and needles in the forest stands is not expected to change as the technical requirements set by the converters regarding water content in the biomass prevent the production of 'green' biomass i.e. biomass containing fresh leaves and needles. The removal of plant nutrients over a rotation period should be evaluated against the pool of nutrients that the location can produce through weathering of soil minerals or air deposition. On very nutrient-poor soils, the removal of nutrients through wood extraction can exceed the nutrients that are added from weathering and deposition and thereby lead to a long-term decrease in the nutrient pool. Forest owners can compensate for the nutrient loss by spreading ash from woody biomass in their stands. The University of Copenhagen has developed a tool to help calculate the nutrient balance of forest stands in connection with biomass extraction and to evaluate the effectiveness of adding nutrients to the forest stand by spreading ash from woody biomass in the stands. It should be mentioned that biomass to some extent is harvested from areas like heaths and bogs where the aim is to keep the soil nutrient levels low, as this is a characteristic of this type of landscape. In such areas, all biomass including needles and leaves is often removed in connection with chipping. The impact on soil structure in connection with the extraction of biomass from forest stands depends on the soil conditions, the machinery used and how and when the machines operate in the forest stand. In private forests, logging and biomass extraction are to a large extent carried out by entrepreneurs who also operate in FSC- or PEFC-certified forests, including the state-owned forests. The same machinery is used in FSC and PEFC-certified forests as well as in non-certified forests and in forests covered or not covered by the Forest Act. The machinery fulfils certification requirements related to low soil impact, and the drivers have a high level of understanding of how to avoid negative impacts on soils. Thus, there are common technical solutions to minimising impacts on soils, e.g. wider tyres with forestry-specific design, and machines operated in a fashion that takes soil conditions into account. Operations are often moved or rescheduled if the soil is waterlogged, so undue soil damage can be avoided. **Risk conclusion and justification** Considering the current practices of not extracting leaves / needles from nutrient poor soils and the possibility of adding nutrients to compensate for a net loss, it can be concluded that the risk of negative impacts on soil nutrient balance and soil structure in connection with feedstock sourcing extraction is low in all forests in Denmark.

2.2.3 continued *Means of verification*	– Regional Best Management Practices – Interviews with staff – Assessment at an operational level of measures designed to minimise impacts on the values identified – The existence of a strong legal framework in the region – Level of enforcement – Regional, publicly available data from a credible third party
Evidence reviewed	– Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Madsen, H. B. (1984). Clay Migration and Podsolisation in a Danish Soil. Geografisk Tidsskrift (Danish Journal of Geography), 84:1, 6-9. DOI: 10.1080/00167223.1984.10649190 – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Petersen, L. & Rasmussen, K. (1987). Jordbundsudvikling under ager og nåleskov. Geografisk Tidsskrift 87: 6567. København, juni 1987. – Videncenter for Halm- og Flisfyring. "Miljøforhold ved brændselsfrembringelse og håndtering."
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
2.2.4	**Where the removal of harvest forest residues and / or stumps occurs, this shall not lead to irreversible negative impacts to the ecosystem.**
Findings	**Scale of assessment** The scale of assessment covers all forests in Denmark. **Analysis** Danish legislation does not prohibit the removal of residues from forests. It is common practice to remove residues after felling operations in all forests, either for the production of biomass feedstock or for firewood. Consultation with Nora Skjernaa Hansen and Bo Larsen (experts working at the Danish Energy Agency) suggests that residues from Danish forests are removed at a higher level than in many countries because of increasing market demand. The experts opined that the removal is also driven by good infrastructure (e.g. roads) connecting forests, types of machinery used for harvesting, intensive forest management practices and overall a good history of using residues. However, the Danish National Forest Inventory shows that the amount of dead wood within the Danish forests is increasing despite the increased demand for biomass. Expert consultation suggests that stump removal for biomass from the harvested area is limited in Denmark. It has to be mentioned here that due to the technical requirements that the biomass has to fulfil with regards to humidity and density, it is generally not accepted by energy producers that decaying wood is used as input in the chips. Decaying wood is generally not used as input in chip production and only occurs exceptionally in Denmark. Therefore, the risk of increased removal of dead wood from forest stands for commercial purposes is low.

2.2.4 continued *Findings continued*	There are currently no reports or other types of evidence indicating that the process of residue removal from forest stands or protected open habitats causes harm to the ecosystems at any notable scale that would result in a specified risk. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above, it is concluded that the risk to ecosystems from residue and stump removal related to the sourcing of feedstock from all forests is low.
Means of verification	– Regional Best Management Practices – Supply contracts – Assessment of potential impacts at the operational level and of measures to minimise impacts – Monitoring results – Publicly available information on the protection of the identified values – Level of enforcement – Regional, publicly available data from a credible third party – The existence of a strong legal framework in the region
Evidence reviewed	– Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Ministry of Environment: "Danmarks Miljøportal". http://arealinformation.miljoeportal.dk/distribution/ – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Nygaard, B., Ejrnæs, R., Juel, A. & Heidemann, R. (2011). Ændringer i arealet af beskyttede naturtyper 1995-2008 – en stikprøveundersøgelse. Danmarks Miljøundersøgelser, Aarhus Universitet. 82 s. – Faglig rapport fra DMU nr. 816: http://www2.dmu.dk/Pub/FR816.pdf
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

2.2.5	**Quality and quantity of ground water, surface water and water downstream shall be maintained or enhanced.**
Findings	**Scale of assessment** The scale of assessment covers all forests in Denmark. **Analysis** Denmark's legislation provides strict protection for the country's water and water sources. The Nature Protection Act has provisions to protect surface water interests in Denmark. The Act states that all natural lakes over 100 m2, along with all watercourses designated for protection by the local municipal authorities, are protected and that their state cannot be altered. The Forest Act protects all ponds and waterbodies located in forests that are themselves protected by the Act, including those not protected by the Nature Protection Act due to size or lack of designation by authorities. Surface and drinking water interests are well protected by the Environmental Protection Act, the Water Sector Act and the Water Utilities Act. The municipalities are the competent authorities for drinking water interests, and The Danish Agency for Water and Nature Management under the Ministry of Environment and Food monitors drinking water interests at a national level. There is no evidence of forest management threats to water quality, and in fact, afforestation projects are sometimes deployed to improve water quality in an area. The rates of use of pesticides and fertilisers in forestry are much lower compared to volumes used in the agricultural sector. The average annual application of pesticides (active ingredient) is 2.1 kg / ha for the agricultural sector and 0.05 kg / ha for the forestry sector (see e.g. Danish Environmental Protection Agency 2012); however, this does not include the annual pesticide application for Christmas trees and greenery production. Additionally, leaching of nitrate from forest areas is typically in the range of 0–10 kg N / year for forests, and typically in the range of 30–120 kg N / year for agricultural land. Based on observations, 70% of forest areas have insignificant nitrate leaching, 20% have some nitrate leaching and for approximately 10% of the forest area, groundwater under the forest does not meet drinking water quality requirements due to nitrate leaching (Raulund-Rasmussen & Hansen 2013). This is significantly lower than what would be expected under agricultural land use. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above, it is concluded that the risk of negative impacts on ground water, surface water and water downstream from forest management activities related to sourcing of feedstock is low for all forests in Denmark.
Means of verification	– Regional Best Management Practices – Supply contracts – Records of BP field inspections – Assessment at an operational level of measures designed to minimise impacts on the values identified – Interviews with staff – Publicly available information on the protection of air quality

2.2.5 continued *Means of verification continued*	– Level of enforcement – Regional, publicly available data from a credible third party – The existence of a strong legal framework in the region
Evidence reviewed	– Environmental Protection Agency. (2012). The Agricultural Pesticide Load in Denmark 2007-2010. Copenhagen, Denmark. – Environmental Damage Act. (25.04.2022). https://www.retsinformation.dk/eli/accn/A20220048229 – Environmental Protection Act. (19.01.2022). https://www.retsinformation.dk/eli/lta/2022/100 – Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Ochre Act. (10.12.2015). https://www.retsinformation.dk/eli/lta/2015/1581 – Raulund-Rasmussen, K. & Hansen, K. (eds.). (2003). Grundvand fra skove – muligheder og problemer. Skovbrugsserien nr. 34, Skov & Landskab, Hørsholm, 2003. 122 s. ill. – Water Supply Act. (10.05.2022). https://www.retsinformation.dk/eli/lta/2022/602 – Watercourse Act. (25.11.2019). https://www.retsinformation.dk/eli/lta/2019/1217
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
2.2.6	**Air emissions shall comply with national legislation or in the absence of national legislation with industry best practice.**
Findings	**Scale of assessment** The assessment covers all air emissions from operations in all forests connected to feedstock sourcing. **Analysis** There is no indication of adverse effects on air emissions and quality of any significance from forest management activities in Denmark. All new forest equipment is subject to the Danish implementation (Bekendtgørelse... 2015) of the 'EU Regulation 2016/1628 on requirements relating to gaseous and particulate pollutant emission limits and type approval for internal combustion engines for non-road mobile machinery'. This regulation includes tractors and other types of machinery typically used in forestry operations. Furthermore, forestry operations are typically carried out in areas some distance from towns and cities. There is no significant use of burning practices in a Danish forestry context. **Risk conclusion and justification** Based on the above, air emissions from forestry operations connected to feedstock sourcing comply with applicable legislation. In fact, there is no evidence of significant emissions from such operations. Therefore, a low-risk class is assigned for this indicator for all forests.

2.2.6 continued *Means of verification*	– Regional Best Management Practices – Supply contracts – Records of BP field inspections – Assessment at an operational level of measures designed to minimise impacts on the values identified – Interviews with staff – Publicly available information on the protection of air quality – Level of enforcement – Regional, publicly available data from a credible third party – The existence of a strong legal framework in the region – Website of European Union Law
Evidence reviewed	– Bekendtgørelse om begrænsning af luftforurening fra mobile ikke-vejgående maskiner mv. (07.12.2015). https://www.retsinformation.dk/Forms/R0710.aspx?id=175847 – REGULATION (EU) 2016 / 1628 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL – of 14 September 2016 – on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024 / 2012 and (EU) No 167 / 2013, and amending and repealing Directive 97 / 68 / EC (europa.eu).
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
2.2.7	**Pesticides shall only be used as part of an Integrated Pest Management (IPM) plan in compliance with national legislation, chemical safety data sheets and industry best practice. Banned pesticides shall not be used.**
Findings	**Scale of assessment** The scale of assessment covers applications of all pesticides in operations in all forests connected to feedstock sourcing. **Analysis** The use of pesticides and other chemicals in the forests of Denmark is limited. Glyphosate is used to control the regeneration of weedy species before replanting and insecticides, including, but not limited to, synthetic pyrethroids, are used to control outbreaks of pine weevil (Hylobius abietis) in the 1–2 years after planting of spruce cultures. Nevertheless, the rates of use of pesticides and fertilisers in forestry are much lower compared to volumes used in the agricultural sector. The average annual application of pesticides (active ingredient) is 2.1 kg / ha for the agricultural sector and 0.05 kg / ha for the forestry sector (see e.g. Danish Environmental Protection Agency 2012). The level of application of pesticides in Christmas tree areas with forests covered and not covered by the Forest Act may be higher than the overall forestry sector average. However, there is no evidence that it is higher than that in agriculture.

2.2.7 continued *Findings continued*	Pesticides and all other chemical applications in Denmark follow the general legislation related to plant protection products. Requirements for licensing of the personnel in charge of and carrying out the application of chemicals, storage and use of only authorised chemicals, use of personal protective equipment and filling and washing of spraying equipment are wellenforced by the responsible authorities. Integrated Pest Management (IPM) practices – prepared in accordance with applicable national legislation, notably, the Forest Act, Environmental Protection Act, Environmental Damage Act as well as authorisation of pesticides by the Danish Environmental Protection Agency – are implemented. This includes the requirement that chemicals are used only to control significant pressure from insects or weeds, based on monitoring and assessment, and that application is carried out responsibly. The use of any kind of pesticide is recorded by the forest owner in a spraying journal. The time-limited and use-specific approval of agrochemicals is controlled by the Environmental Protection Agency, which is a part of the Danish Ministry of Environment. There is no report of the use of banned pesticides in forestry in Denmark. **Enforcement and monitoring** Danish national legislation includes strict regulations and oversight by 'Arbejdstilsynet' (Work Environment) on pesticide storage and use. The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. No report of the use of banned pesticides in forestry suggests an effective enforcement and monitoring of related regulations. **Risk conclusion and justification** The above analysis suggests that pesticide application in forestry is limited in Denmark. Pesticides are usually applied as a part of IPM and prepared in compliance with applicable national legislations, guidelines and best practices. The use of banned pesticides is also not reported. Therefore, the risk for this indicator has been assessed as low in all forests.
Means of verification	– Website of Environmental Protection Agency – Existing legislation – Level of enforcement – Assessment, at an operational level, of measures designed to minimise impacts on the values identified – Monitoring records – Interviews with staff
Evidence reviewed	– Environmental Protection Agency. (2012). The Agricultural Pesticide Load in Denmark 2007-2010. Copenhagen, Denmark. – Environmental Damage Act. (25.04.2022). https://www.retsinformation.dk/eli/accn/A20220048229 – Environmental Protection Act. (19.01.2022). https://www.retsinformation.dk/eli/lta/2022/100 – Environmental Protection Agency: "Applications for authorisation" https://eng.mst.dk/chemicals/pesticides/applications-for-authorisation-after-14-june-2011/

2.2.7 continued *Evidence reviewed continued*	– Environmental Protection Agency: "Professional user of plant protection products". https://eng.mst.dk/chemicals/pesticides/professional-user/ – Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Ministry of Environment: "Fact sheet: Banned pesticides". https://eng.mst.dk/chemicals/chemicals-in-products/legal-framework-for-managing-chemicals/fact-sheets/fact-sheet-banned-pesticides/ – Watercourse Act. (25.11.2019). https://www.retsinformation.dk/eli/lta/2019/1217
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
2.2.8	**Waste shall be disposed of in an environmentally appropriate manner.**
Findings	**Scale of assessment** The scale of assessment covers the management of all wastes generated by forestry operations connected to feedstock sourcing. **Analysis** The Danish Environmental Protection Act (Sections 43-50) regulates waste management in Denmark. Under this Act, local authorities are responsible for the management of all waste in Denmark. There is no report that wastes generated by forest management activities or other forest owner-mandated activities connected to feedstock sourcing are disposed of indiscriminately. Littering and illegal waste disposal in Danish forests do occur along roads, parking spaces and recreational facilities, especially where these occur near cities and recreational sites that are often visited by forest guests. Whenever possible, the source of the waste is identified, and police are notified. **Enforcement and monitoring** The Danish Environmental Protection Agency under the Ministry of Environment enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above discussion, waste disposal in forests and from forestry operations is minimal and so is its impact. Therefore, the risk class for this indicator is assessed to be low in all forests of Denmark.
Means of verification	– Existing legislation – Level of enforcement – Regional Best Management Practices – Operational assessment of potential impacts and of measures to minimise the impact
Evidence reviewed	– Environmental Protection Act. (19.01.2022). https://www.retsinformation.dk/eli/lta/2022/100 – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392

Annex 1 Detailed findings for Supply Base Evaluation continued

2.2.8 continued *Risk rating*	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
2.2.9	**Harvesting levels shall be justified as to how they can be sustained with reference to inventory and growth data for the Supply Base.**
Findings	**Scale of assessment** The scale of assessment covers forest harvesting in Denmark. **Analysis** According to the Danish National Forest Inventory (NFI) 2021 – which covers all forests in the country – there has been a net increase in both forest area and standing volume in the period examined (2017–2021) (Nord-Larsen et al. 2023). Over the period examined, the standing volume on average increased by an estimated 2.1 million m^3 per year, compared to a total annual harvest and mortality of 4.3 million m^3 per year, for a total annual increment of 6.4 million m^3 per year. Due to age class distribution in the individual forests, there can be management plan periods where the harvest levels exceed the increase in standing volume. These harvest levels are justified using inventory and growth data and do not threaten forest productivity or long-term economic viability. However, a forest management plan is not a legal requirement in Denmark for forests that are not Natura 2000 sites (Preferred by Nature 2017), and some smaller forest estates do not have management plans at all as opined by Sofie Tind Nielsen from WWF Denmark. In particular, in non-fredskov harvesting levels are not required by any legislation to be sustained regarding inventory and growth data. **Enforcement and monitoring** The Danish Environmental Protection Agency under the Ministry of Environment enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above information, the risk for this Indicator has been assessed as low for forests covered by the Act and specified for forests not covered by the Act.
Means of verification	– Harvesting records, inventory and growth data and yield calculations demonstrate that biomass feedstock harvesting rates are not having significant negative impacts on forest productivity and long-term economic viability – Documentation of Operational Practice
Evidence reviewed	– Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Nord-Larsen, T., Johannsen, V. K., Riis-Nielsen, T., Thomsen, I. M., Bentsen, N. S., Jørgensen, B. B. (2023). Skovstatistik 2021. Institut for Geovidenskab og Naturforvaltning. 60 s.
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Specified risk**

2.2.10	**Harvested areas shall be regenerated.**
Findings	**Scale of assessment** The scale of assessment covers the regeneration of harvested areas within all forests in Denmark. **Analysis** As mentioned in Indicator 1.1.1, Article 8 of the Danish Forest Act states that areas covered by the Act must support trees that are expected to form a full-height stand with a closed canopy i.e. to reach maturity. The same article also states that tree stands cannot be felled before they have reached maturity and the area must meet the above requirements at the latest ten years after clearcutting. This implies that a harvested area (i.e. a clearcut) has to be regenerated. However, the Nature Protection Act does not have any such provision for regeneration. This means the forests not covered by the Forest Act are not required to be regenerated after harvesting. Moreover, the legal requirements set by the Handbook enacted in 2021 to help implement EU REDII (Danish Energy Agency 2022a) specified that biomass must come from legally harvested trees and that felled trees must be replanted. According to Section 5.2 of the Handbook, a felled forest area must be regenerated in the same area according to national legislation that meets the requirements (i.e. Forest Act). The regeneration should be done according to prevailing management systems in the same area, not in a replacement area (Handbook, Section 5.3), which ensures that the area is not transferred to another use. For the forests not covered by the Forest Act, compliance with the regeneration requirement must be documented according to Section 5.3.1 of the Handbook. Biomass coming from a clearcut area cannot be sold for energy generation purposes if the owner of the clearcut forest area does not want to replant. The Handbook covers forest-based biomass feedstock (including both primary feedstock and processing residues) coming from all sources within Denmark i.e. forests covered by the Forest Act, and forests not covered by the Act. However, it has to be noted here that the jurisdiction of the Handbook covers bioenergy producers of capacity above 2.5 MW. This means forests – irrespective of their coverage by the Forest Act – must be regenerated when they are harvested for supplying biomass to bioenergy producers of capacity above 2.5 MW. Since the Forest Act requires the regeneration after harvesting of forests covered by it, biomass from such forests is not a risk under this indicator even if supplied to the biomass producers of capacity 2.5 MW or below. However, forests not covered by the Forest Act that are supplying biomass to producers of capacity 2.5 MW or below are under no legal obligation to be regenerated and thus at risk. Nora Skjernaa Hansen and Bo Larsen (experts working at the Danish Energy Agency) mentioned that bioenergy producers of capacity 2.5 MW or below – who do not have to comply with the Handbook – together consume about 2% of the total biomass consumed in the country. These producers mainly use domestic biomass. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment enforces the Forest Act and Nature Protection Act. The Danish Energy Agency under the Ministry of Climate, Energy and Utilities enforces regulations related to energy. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above analysis, it is concluded that the risk rating for this Indicator is 'low risk' for forests covered by the Forest Act and 'specified risk' for forests not covered by the Forest Act.

2.2.10 continued *Means of verification*	– Relevant webpages of the Danish Nature Agency, Danish Environmental Protection Agency, Danish Environmental Agency, Ministry of Environment, Ministry of Climate, Energy and Utilities, the Danish Parliament – Relevant Danish national acts, laws and regulations
Evidence reviewed	– Danish Energy Agency. (2020). Biomass Analysis May 2020. Copenhagen. – Danish Energy Agency. (2022a). Order on Handbook on the fulfilment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål). https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf – Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Political agreement on legal requirements for woody biomass (Opfølgende aftale ifm. Klimaftale for energi og industri mv.) on 2 October 2020. – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Preferred by Nature. (2017). Timber legality assessment Denmark. Version 1.3
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Specified risk**
2.2.11	**The impacts of natural processes such as fires, pests and diseases shall be managed.**
FIndings	**Scale of assessment** The scale of assessment covers the impacts of natural processes in all forests in Denmark. **Analysis** The overall political framework for the forests in Denmark is defined in the legislation and within the National Forest Program from 2002 which was revised in 2014. The Forest Act requires that forest owners maintain forest cover on forest land, as well as establish 'robust forests' with a high level of resistance and resilience towards known calamities such as pests, wind, and climate change. Generally, fires, pests and diseases occur on a small scale in Danish forests and are managed by the forest owner. This applies to tree-covered areas such as hedges and Christmas tree plantations and trees outside houses as well. The main natural process that has a negative impact on forest stands is storms that cause windthrow. It is the responsibility of the forest owners and / or managers to apply silvicultural methods that improve the stability of forest stands. Incentives to establish robust forest stands are built into various subsidiaries for private forest owners (stormfaldsordningen, regeneration, and reforestation). Replanting after windthrow in private forests is subsidised through an insurance system which covers most forest owners. State forests are managed according to 'close to nature' forest management principles with the intent to promote species composition and forest structure with a high level of resistance and resilience. The management of other types of pests, fires and diseases is carried out by each forest owner and is generally based on knowledge and guidance provided by internal forest staff, forestry consultants, forestry magazines and other channels of information.

2.2.11 continued *FIndings continued*	**Enforcement and monitoring** The Danish Environmental Protection Agency under the Ministry of Environment enforces the relevant legislation. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the above discussion, the impacts of natural processes such as fires, pests and diseases in all forests are well managed. Thus, it is concluded that there is a low risk of noncompliance with the requirement of this indicator.
Means of verification	– Forest inventory results – Review of documentation – Interviews with private and State Forest management staff – General knowledge about forest practices collected from general engagement with the forest sector
Evidence reviewed	– Forest and Nature Agency. (2005). Handlingsplan for naturnær skovdrift i statsskovene. Udgivet af Miljøministeriet, Skov- og Naturstyrelsen, 2005 – Nord-Larsen, T., Johannsen, V. K., Riis-Nielsen, T., Thomsen, I. M., Bentsen, N. S., Jørgensen, B. B. (2023). Skovstatistik 2021. Institut for Geovidenskab og Naturforvaltning. 60 s. – Ravn, H. P. (2020). Typografsituationen i 2020. Institut for Geovidenskab og Naturforvaltning, Københavns Universitet. – The University of Copenhagen. "Damage to forests (Skader på skov.)" https://videntjenesten.ku.dk/skov_og_natur/skader_paa_skov/ – The University of Copenhagen: "Results from the national Forest Vitality monitoring program." https://ign.ku.dk/samarbejde-med-ign/forskningsbaseret-raadgivning/skovsundhed/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
2.2.12	**Genetically modified trees shall not be used.**
Findings	**Scale of assessment** The scale of assessment covers the use of genetically modified (GM) trees for feedstock in all forests. **Analysis** There is no commercial use of GM trees in Denmark. All approved GMO species within the EU (also covering Denmark) can be identified in the EU register of authorised GMOs (http://ec.europa.eu/food/dyna/gm_register/index_en.cfm) and no tree (i.e. wood-producing) species are registered. Several trial releases have occurred for GMOs in Denmark but none was for tree species. All trial releases must be subject to a process of public consultation. There are no reports of the illegal use of GMO species in Danish forestry.

2.2.12 continued *FIndings continued*	**Risk conclusion and justification** As there is no evidence of the use of GM trees in Denmark, the risk for this indicator has been assessed as low for all forests.
Means of verification	– EU register of authorised GMO: http://ec.europa.eu/food/dyna/gm_register/index_en.cfm – Global Forest Registry: http://www.globalforestregistry.org/
Evidence reviewed	– EU register of authorised GMO: http://ec.europa.eu/food/dyna/gm_register/index_en.cfm – Global Forest Registry: http://www.globalforestregistry.org/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

Principle 3 – Feedstock is only sourced from supply bases where the forest carbon stock is stable or increasing in the long term

Criterion 3.1 – Feedstock sourcing is consistent with international requirements for land use, land-use change and forestry (LULUCF) emissions

Element	Description and analysis
3.1.1	**LULUCF emissions shall be accounted for through one of the following routes:** **Route A** Feedstock may be sourced from a country of origin which is party to the Paris Agreement, and which has submitted a Nationally Determined Contribution to the United Nations Framework Convention on Climate Change (UNFCCC) covering carbon emissions and removals from agriculture, forestry and land use which ensure the changes in carbon stock associated with biomass harvest are counted towards the country's commitment to reduce or limit greenhouse gas emissions, or **Route B** Feedstock may be sourced from a country of origin which is party to the Paris Agreement and has national or sub-national laws in place (developed in accordance with Article 5 of the Paris Agreement and applicable in the area of harvest), to conserve and enhance carbon stocks and sinks, and provided there is evidence that reported LULUCF-sector emissions do not exceed removals, or **Route C** Feedstock may be sourced from a Supply Base where an assessment demonstrates that both the carbon stock is stable, and the forests' capacity to act as a carbon sink is stable or increasing over the long term.

3.1.1 continued *Findings*	**Scale of assessment** The assessment covers Denmark's participation in the Paris Agreement in the context of all forests in Denmark. Route A is applied. **Analysis** Denmark ratified the Paris Climate Agreement in 2016 (UNFCCC: "Denmark") and has submitted a Nationally Determined Contribution as an EU member state to the UNFCCC covering carbon emissions and removals from land use, land use change and forestry (LULUCF). This ensures that the changes in carbon stock associated with biomass harvest are counted towards the country's commitment to reduce or limit greenhouse gas emissions (European Commission, 2020). Denmark submitted its seventh national communication and fourth biennial report under the UNFCCC in 2018 and 2019, respectively (Rasmussen, 2018, Ministry of Energy, Utilities and Climate, 2019a). For the base year 1990, the historical emissions/removals for the LULUCF sector were 4.9 million tonnes of CO_2 equivalents (Rasmussen, 2018). Denmark's climate policy is based on the EU, UNFCCC, Kyoto Protocol, and Paris Agreement requirements. Common policies of the EU play a major role in the implementation of international agreements (Rasmussen, 2018). The national emission reduction targets are presented in the National Energy and Climate Plan 2030 (Ministry of Energy, Utilities and Climate, 2019b). For the whole LULUCF sector, Denmark's target is to be at least climate neutral i.e. the emissions do not exceed removals (Ministry of Energy, Utilities and Climate, 2019b). The above also means that Denmark is fully compliant with Article 29.7 of the EU REDII. **Enforcement and monitoring** Denmark has thus far done all the required reporting and review related to the Paris Agreement. The reporting is subject to multilateral assessment. **Risk conclusion** Based on the reviewed evidence it is concluded that there is a low risk of noncompliance with the requirement both for forests covered by the Forest Act and forests not covered by the Forest Act.
Means of verification	– UNFCCC website and NDC registry – UNFCCC national communications and biennial reports – National policies and plans
Evidence reviewed	– European Commission. (2020). Update of the NDC of the European Union and its Member States. https://unfccc.int/sites/default/files/NDC/2022-06/EU_NDC_Submission_December%202020_0.pdf – Ministry of Energy, Utilities and Climate. (2019a). Denmark's Fourth Biennial Report under the United Nations Framework Convention on Climate Change. Published by the Ministry of Energy, Utilities and Climate. – Ministry of Energy, Utilities and Climate. (2019b). Denmark's Integrated National Energy and Climate Plan under the Regulation of the European Parliament and of the Council on the Governance of the Energy Union and Climate Action. – Rasmussen, E. (ed.) (2018). Denmark's Seventh National Communication and Third Biennial Report under the United Nations Framework Convention on Climate Change. Published by the Ministry of Energy, Utilities and Climate. – UNFCCC: "Denmark". https://unfccc.int/node/61052

Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

Criterion 3.2 – Carbon stocks in the forest area of the Supply Base are stable or increasing in the long term

Element	Description and analysis
3.2.1	**All feedstock sourcing shall be consistent with either of these two options:** **Option A** Feedstock may be sourced from Supply Bases where an assessment of the Supply Base shows that the forest carbon stocks are stable or increasing, or **Option B** Feedstock may be sourced, if the assessment shows that the forest carbon stocks are declining in the Supply Base, provided that the decline is due to natural processes (fire, pests etc.), and sourcing of feedstock has the aim to recover feedstock that would otherwise be lost or to assist regeneration.
Findings	**Scale of assessment** The Danish National Forest Inventory (NFI) hosted by The Danish Environmental Protection Agency includes the assessment of forest carbon stocks. The Danish national GHG emissions reporting made under the UNFCCC and the Kyoto Protocol includes the reporting of current and projected GHG removals and emissions. The assessment covers all forests in Denmark. **Analysis** The latest inventory of Danish forest resources conducted in 2021 (Nord-Larsen et al. 2023) shows that the growing stock amounts to a total of 143 million m^3 and that forest growing stocks and forest carbon stocks have been increasing in Denmark since the 1990s; annual harvest rates have also consistently been lower than the annual increment. The size of the actual increase compared to the 1990s and early 2000s is not known as the growing stock and thus carbon stock was estimated using a different methodology at the time. However, the first inventory with a similar design to the current one was published in 2006, and hence there is a reasonable timeframe for which the actual development of the carbon stocks is known. The increase is, in part, related to the continuous expansion of woodland areas. However, the key reason behind the increase may be that the method for estimating the volume of growing stock is no longer based on the distribution of age and species as in the past inventories. In 2020, the Danish forests have been estimated to be a net sink of 2.2 million tonnes of CO_2 equivalents (Nielsen et al., 2022). Overall, in the last 20 years, the forests in the country have been a relatively large sink with annual sequestration ranging from 1.2 million tonnes to 4 million tonnes of CO_2 equivalents (Nielsen et al. 2022). The total carbon stock in forests' biomass is currently 44.4 million tonnes with an upward trend since the 1990s (Nord-Larsen et al. 2023). According to Graudal et al. (2013), it is possible to make very substantial improvements in the figures for harvest and storage. The report assesses that certain initiatives pertaining to the cultivation of the forests could increase the harvest of wood by 30% by 2050 all the while the amount of carbon stored in the forests would rise correspondingly. In the predictions until 2050, the total forest carbon pool and carbon capture are predicted to increase (Johannsen et al., 2019). Similar conclusions are presented in the seventh national communication: the Danish forests are expected to be a steady sink until 2035, which is primarily due to the expectations of an increase in a forest area with the related increase in carbon stock (Rasmussen, 2018).

3.2.1 continued *Findings continued*	Currently, there is no evidence that forestry practice has an impact on any remaining, important largescale forests. Forest operations are planned and implemented in accordance with the requirements of the relevant legislation. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency, both under the Ministry of Environment, enforces the Forest Act and the Nature Protection Act. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. The forests are monitored regularly in the NFI. GHG monitoring and future projections are presented regularly in the reporting related to the Paris Agreement. **Risk conclusion and justification** Based on the evidence reviewed, option A is applied and the risk for non-compliance with this indicator is concluded to be low both for forests covered by the Forest Act and forests not covered by the Forest Act.
Means of verification	– Applicable legislation – National forest inventory data – Statistical reports – Public reports and plans
Evidence reviewed	– Forest Act (2019). https://www.retsinformation.dk/eli/lta/2019/315 – Graudal, L., Nielsen, U.B., Schou, E., Thorsen, B.J., Hansen, J.K., Bentsen, N.S., og Johannsen, V.K. (2013). Muligheder for bæredygtig udvidelse af dansk produceret vedmasse 2010-2100. Perspektiver for skovenes bidrag til grøn omstilling mod en biobaseret økonomi, Institut for Geovidenskab og Naturforvaltning, 86 s. ill. – Johannsen, V.K., Nord-Larsen, T., Bentsen, Niclas S. & Vesterdal, L. (2019). Danish National Forest Accounting Plan 2021-2030. IGN report. Department of Geosciences and Resource Management, University of Copenhagen, Frederiksberg. 79 p. ill. – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Nielsen, O.-K., Plejdrup, M.S., Winther, M., Nielsen, M., Gyldenkærne, S., Mikkelsen, M.H., Albrektsen, R., Thomsen, M., Hjelgaard, K., Fauser, P., Bruun, H.G., Johannsen, V.K., Nord-Larsen, T., Vesterdal, L., Stupak, I., Scott-Bentsen, N., Rasmussen, E., Petersen, S.B., Baunbæk, L., & Hansen, M.G. (2022). Denmark's National Inventory Report 2022. Emission Inventories 1990-2020 – Submitted under the United Nations Framework Convention on Climate Change and the Kyoto Protocol. Aarhus University, DCE – Danish Centre for Environment and Energy, 969 pp. Scientific Report No. 494 http://dce2.au.dk/pub/SR494.pdf – Nord-Larsen, T., Johannsen, V. K., Riis-Nielsen, T., Thomsen, I. M., Bentsen, N. S., Jørgensen, B. B. (2023). Skovstatistik 2021. Institut for Geovidenskab og Naturforvaltning. 60 s. – Rasmussen, E. (ed.) (2018). Denmark's Seventh National Communication and Third Biennial Report under the United Nations Framework Convention on Climate Change. Published by the Ministry of Energy, Utilities and Climate.
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

3.2.2	**Primary feedstock shall not be sourced from forest areas where site productivity is low and, according to local definitions or norms, the areas are classified as low-productive or difficult to regenerate.**
Findings	**Scale of assessment** In Denmark, there are several distinguishable forest types categorised based on e.g. species composition and site productivity. The assessment will focus on analysing whether there are low-productivity types, and if those exist, whether the low-productivity types are addressed in Danish legislation and regulations. The assessment covers all forests in Denmark. **Analysis** Danish forests have been divided into 19 development types, each type falling into one of the following categories: broadleaf-dominated, conifer-dominated, or "historic" forest types. The forest development types were depicted in a catalogue developed in conjunction with a shift to "near-natural forestry" in the state forests in 2004-2005 (Larsen, 2005). Each forest type is described in terms of species composition, soil nutrient supply, and soil water-holding capacity. Development goals for each forest type are described as well, divided into three categories: wood production, biological values, and recreational values. Thus, the production capacity per forest type can be assessed and forest types with limited capacity for wood production are identified. Such forest development types occur for example on nutrient-poor sands with limited water supply. However, most forest development types described in the catalogue are described as suitable for wood production. During the stakeholder consultation, it was stated that in general, growing conditions are good in Denmark and that there are few forest areas which can be described as low-productive, such areas mainly being some coastal forests. As the stakeholders also opined, woody biomass from low-nutrient wetlands (such as heaths) and moors are mostly kept cleared as part of nature conservation to keep the landscape open, not for commercial biomass sourcing. Overall, the extent of these areas is small, and many of them are not affected by forestry. The Forest Act gives basic protection from over-exploitation of the forests covered by the Act, and one of the Act's purposes is to secure forests' production. Many forest types are protected as Natura 2000 areas or by the Nature Protection Act and the Forest Act as well. However, there are no specific requirements prohibiting the sourcing of wood from low-productive sites or areas where regeneration is difficult: Neither the Forest Act nor the Nature Protection Act addresses the issue. Moreover, the Handbook enacted in 2021 to help implement EU REDII (Danish Energy Agency 2022a) does not have any provision regarding this issue. **Enforcement and monitoring** The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency, both under the Ministry of Environment, enforces the Forest Act and the Nature Protection Act. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the evidence reviewed, the risk for non-compliance with this indicator is concluded to be low both for forests covered by the Forest Act and forests not covered by the Forest Act. While it cannot be guaranteed that feedstock is not sourced from low-productive sites or areas where regeneration is difficult in the supply base, the extent of such areas is small and thus, the risk is negligible.
Means of verification	– Relevant reports and webpages of the concerned agencies – Relevant Danish national acts, laws and regulations – Expert consultation

Evidence reviewed	– Danish Energy Agency. (2022a). Order on Handbook on the fulfilment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål). https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf – Forest Act (2019). https://www.retsinformation.dk/eli/lta/2019/315 – Larsen, J. B. (2005). Katalog over skovudviklingstyper i Danmark. Udgivet af Miljøministeriet, Skov- og Naturstyrelsen 2005. – Nature Protection Act (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
3.2.3	**Primary feedstock shall not be sourced from forest areas in the Supply Base which, according to local definitions or norms, are classified as having combined attributes of high carbon stocks and high conservation value (HCV).**
Findings	**Scale of assessment** The Danish National Forest Inventory (NFI) – hosted by The Danish Environmental Protection Agency – includes the assessment of forest carbon stocks. Biodiversity in Danish forests is relatively well researched and most risks are known. The assessment covers all forests in Denmark. **Analysis** The EU (e.g. REDII) considers high carbon stocks to be in wetlands, peatlands and forests (EU REDII, EU Glossary Item: "Land with high carbon stock"). In the context of forest ecosystems, mature and old-growth forests have the highest carbon stocks, and are also important for biodiversity, especially those with a higher degree of naturalness (e.g. Molina-Valero et al. 2021, Ķēniņa et al. 2019, Nord-Larsen et al. 2019, Seedre et al. 2015, Luyssaert et al. 2008). However, high carbon stock has been observed to be independent of the degree of naturalness and the maximum live carbon stock can be reached at earlier stages than the old-growth stage (e.g. Molina-Valero, 2021) although structural complexity does play into the maintenance of high carbon storage (e.g. Lussayert et al. 2008). The European Green Deal (European Commission, 2019) and the EU Biodiversity Strategy for 2030 (European Commission, 2020) emphasise the need to protect the remaining primary and old-growth forests that store large carbon amounts. Additionally, they address the need to increase the quantity, quality, and resilience of European forests overall. Wetlands and natural peatland ecosystems classified as non-forest mires are outside the scope of this indicator but mature (including secondary forests) and old-growth forests and wetland forests will be assessed. Danish forests are surveyed by the Department of Geosciences and Natural Resource Management at Copenhagen University using a sampling methodology and documented under the Danish National Forest Inventory (NFI) hosted by The Danish Environmental Protection Agency. Danish forests are generally relatively young: 37,500 ha or 6% of the total forest area is over 100 years old, and only 8,400 ha or 1% are over 150 years old (Nord-Larsen et al., 2023).

3.2.3 continued
Findings continued

Biologically valuable forests in Denmark belong to nine protected habitat types defined by the EU: 9110 Luzulo-Fagetum beech forests, 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrub layer (Quercion robori-petraeae or Ilici-Fagenion), Medio-European limestone beech forests of the Cephalanthero-Fagion, 9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli, 9170 Galio-Carpinetum oak-hornbeam forests, 9190 Old acidophilous oakwoods with Quercus robur on sandy plains, 91D0 Bog woodland, and 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) (Ministry of Environment, 2019). Two of these types are wetland forest types: 91D0 and 91E0.

While many significant and important HCV areas critical to conservation are designated as protected areas at the national or EU level (Natura 2000), there is very likely a significant number of smaller areas or biotopes of local or regional importance to biodiversity or species habitats. In the Danish context, these are called key biotopes ("nøglebiotoper"). These areas are not systematically identified and mapped. The tool recommended by The Danish Agency for Water and Nature Management for the identification of key biotopes is a catalogue of examples developed and published in 2001 (The Ministry of Environment and Energy & The Forest and Nature Agency 2001).

A 2015 report by the Department of Geosciences and Natural Resource Management at Copenhagen University describes a method for generating a high nature value (HNV) forest map for Denmark (Johannsen et al. 2015). Based on this, an interactive map has been developed and made publicly available online. The online map will provide an indication of areas (shown as a colour gradient) where a combination of factors makes the occurrence of the high nature value forest more likely.

Further identification of 'forests containing particular natural values' is a goal of the Danish Forest Act (Article 25) (Forest Act 2019). The registration under Article 25 of the Forest Act in private forest areas has been initiated in 2022. This registration is being carried out for both fredskov and forests not covered by the Forest Act and is expected to finish in 2024 (Ministry of Environment: "Kortlægning af naturmæssigt særlig værdifuld skov – § 25 skov"). However, it was brought up in the stakeholder consultation that only the larger ecosystems and forest types are systematically mapped, and that there very likely remains a large number of unidentified smaller areas or biotopes of local or regional importance to biodiversity or species habitats.

Overall, the state of the protection of forest areas with HCV is relatively good in Denmark in the sense that the larger ecosystems and forest types are and will be identified and mapped for the most part. Danish forestry is generally well-regulated and monitored. About 70% of the Danish forest area is regulated by the Forest Act and is set aside as fredskov (Forest Act 2019). 194,890 ha of forests remain outside of the fredskov and are not covered by the Forest Act. 54,710 ha (28%) of these forests are protected by the Nature Protection Act, which means that 140,180 ha of forests in Denmark are covered by neither the Forest Act nor Nature Protection Act (source: Thomas Nord-Larsen, Forest and Landscape, Copenhagen University). The Danish Environmental Impact Assessment legislation (lov om miljøvurdering af planer og programmer og af konkrete projekter (VVM)) (https://www.retsinformation.dk/eli/lta/2021/1976) – as per consultation with Tanja Blindbæk Olsen of the Danish Forest Association – protects forests not covered by the Forest Act from being converted to agricultural land.

EU REDII is implemented in Denmark with the aid of a Handbook by the Danish Energy Agency that further promotes sustainable feedstock sourcing from forests. However, it should be noted that the condition of all Habitats Directive forest habitats is unfavourable/bad (category U2) (Ministry of Environment, 2019).

3.2.3 continued *Findings continued*	In addition, referring to indicator 2.1.1, two feedstock categories were found to include a specified risk: feedstock from even-aged stands of native old-growth conifers and feedstock from uneven-aged stands or stands of broadleaf species. In both categories, the risk is related to the potentially unmapped key biotopes, and both categories overlap with the areas defined in this indicator. The possibility that the unmapped key biotopes are located in areas with a high carbon stock, such as a secondary mature forest, cannot be ruled out. **Enforcement and monitoring** Both significant and important HCV areas have been identified and mapped by the Danish authorities and designated as protected areas at the national or EU level (Natura 2000). The mapping of 'forests containing particular natural values' is ongoing. Most areas with high carbon stocks are strictly protected according to Danish legislation. The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment enforces the Forest Act and the Nature Protection Act. Regular monitoring of the enforcement is conducted and reported by the concerned agencies. **Risk conclusion and justification** Based on the evidence provided above, it is concluded that there is a risk that at least locally important key biotopes both in forests covered by the Forest Act and forests not covered by the Forest Act have not yet been identified and mapped and may therefore be at risk due to the sourcing of biomass. In practice, the areas of concern would be old, mature forest stands that are in a natural or semi-natural state and have not been identified or mapped. However, it is also concluded that some source types are inherently low in key biotopes, such as first-generation afforestation areas or even-aged stands of conifers.
Means of verification	– Relevant Danish legislation and regulations – Regional, publicly available data from a credible third party – The existence of a strong legal framework in the region – Relevant maps and data portals – Procedures and records
Evidence reviewed	– Brown, E., N. Dudley, A. Lindhe, D.R. Muhtaman, C. Stewart, and T. Synnott (eds). (2013). Common Guidance for the Identification of High Conservation Values. HCV Resource Network. – Danish Forest Association (Dansk Skovforening). (2022). Nu begynder kortlægning af værdifuld natur i private skove. https://www.danskskovforening.dk/nyhed/nu-begynder-kortlaegning-af-vaerdifuld-natur-i-private-skove/ – Danish Society for Nature Conservation: "Interactive map of protected areas". http://www.fredninger.dk/ – EU Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive) – EU Glossary Item: "Land with high carbon stock". https://knowledge4policy.ec.europa.eu/glossary-item/land-high-carbon-stock_en – EU Renewable Energy Directive (RED) II – DIRECTIVE (EU) 2018/ 2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL – of 11 December 2018 – on the promotion of the use of energy from renewable sources (europa.eu)

3.2.3 continued

Evidence reviewed continued

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3.2.3 continued *Risk rating*	**Forests covered by Danish Forest Act: Specified risk** **Forests not covered by Danish Forest Act: Specified risk**

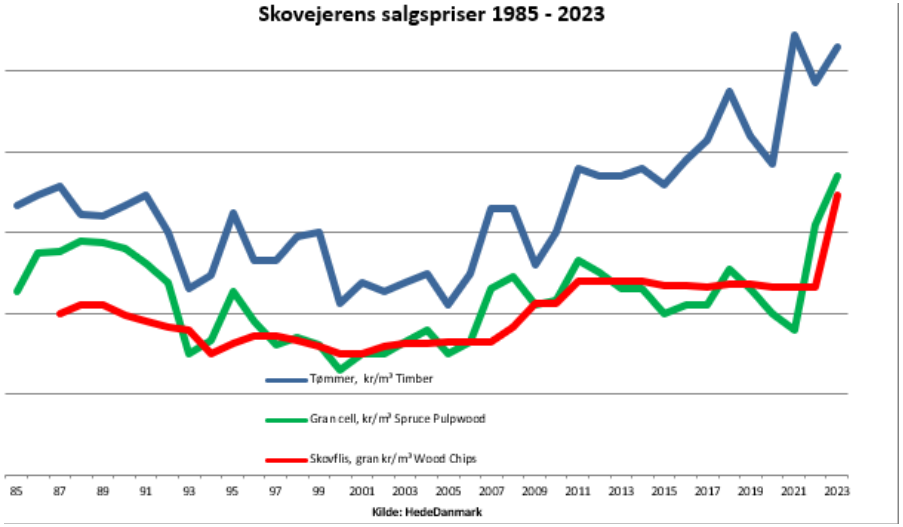
Criterion 3.3 – Feedstock sourcing shall not compete with wood sourcing for long-lived wood products

Element	Description and analysis
3.3.1	**Feedstock sourcing shall be in compliance with the principles of cascading use, high quality stem wood shall not be used as feedstock if it is in substantial demand for long-lived products in the Supply Base.**
Findings	**Scale of assessment** The scale of assessment covers all forests in Denmark. **Analysis** The Danish Forest Act (Forest Act 2019) provides the main legislative framework for forestry in the country. The Act covers about 70% of forests which are a major source of woody feedstock in the country. The Nature Protection Act covers only 28% of the forests that are not covered by the Forest Act. Neither Act has any provision directly related to forest-based feedstock sourcing and biomass production nor restricts the use of wood and forest biomass for bioenergy purposes. The Danish Energy Agency's "handbook" which was first introduced in 2021 and amended in October 2022, does not include any requirements that are relevant to this indicator as they are related to using only waste and residues in energy production (Danish Energy Agency 2022a). According to the local expert consultation, there is no legal or regulatory requirement to report the quality of wood used for energy production which makes the assessment of the implementation of the cascade principle difficult. There are also situations where wood that could be used as timber is instead used in energy production due to high biomass prices and other factors such as the size of the harvested area. However, such cases do not occur frequently and according to the price information acquired in the stakeholder consultation, timber prices have been consistently higher than biomass prices over the past four decades (Figure 5.1). The prices of pulpwood and energy biomass are relatively close to each other and there have been periods where the biomass price has been higher than the pulpwood price. However, the pulpwood price has been higher than biomass price for most of the time. Market and higher timber prices have most likely steered the utilisation of high-quality wood according to the cascade principle and there is no evidence that high-quality stem wood is utilised in energy production on a large scale.

3.3.1 continued

Findings continued

Figure 5.1. The selling prices of timber, spruce pulpwood, and wood chips in Denmark from 1985 to 2023. Data source: HedeDanmark.



Most of the wood used in energy production in Denmark is imported: 32% of the total amount of wood used for the production of electricity and heating in 2021 was of domestic origin, while 68% was imported (Danish Energy Agency 2022b). The Danish Forest Statistics reports that of the total amount of wood harvested in 2019, 43% was used for timber (construction, furniture, floors, etc.) and 57% was used for energy (firewood, wood chips, round wood) (Nord-Larsen et al. 2023). Wood forms a substantial part of Danish energy production, so a close eye should be kept on the quality of wood used for that purpose in the coming years.

Enforcement and monitoring

The Danish Energy Agency under the Ministry of Climate, Energy and Utilities enforces regulations related to energy. Regular monitoring of the enforcement is conducted and reported by the concerned agencies.

Risk conclusion and justification

Based on the evidence provided above, it is concluded that the risk of non-compliance with the indicator is low both for forests covered by the Forest Act and forests not covered by the Forest Act. However, the developments both in biomass demand and price must be considered when reassessing this indicator in the future. In particular, the prices of pulp wood and wood chips have to be closely monitored. The market alone might not be enough to ensure the cascading use of wood in the coming years if market disturbances and societal disturbances similar to the recent ones continue.

3.3.1 continued *Means of verification*	– Relevant reports and webpages of the Danish Energy Agency – Relevant Danish national acts, laws and regulations – Expert consultation – Price data provided in the stakeholder consultation
Evidence reviewed	– Danish Energy Agency. (2022a). Order on Handbook on the fulfillment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål). https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf – Danish Energy Agency. (2022b). Energistatistik 2021. Energistyrelsen. – Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – Nord-Larsen, T., Johannsen, V. K., Riis-Nielsen, T., Thomsen, I. M., Bentsen, N. S., Jørgensen, B. B. (2023). Skovstatistik 2021. Institut for Geovidenskab og Naturforvaltning. 60 s.
RIsk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

Principle 4 – Feedstock sourcing benefits people and communities

Criterion 4.1 – Decent working conditions are provided, and labour rights are safeguarded

Element	Description and analysis
4.1.1	**Freedom of association and the right to collective bargaining shall be respected in the workplace.**
Findings	**Scale of assessment** The law on freedom of association in the labour market protects workers' freedom of association rights by prohibiting an employer from favouring whether a worker is or is not a union member (Freedom of Association Act 2006). The law protects in connection with hiring and termination. The law also prohibits so-called exclusivity clauses in collective agreements. This means that collective agreements must not contain provisions that workers must be members of a union or a particular union. Exception: if an employer promotes a certain political, ideological, religious or cultural viewpoint, and this is central to its business, the employer is exempt from the law's general regulation. The legislation does not apply to the Faroe Islands and Greenland.

4.1.1 continued *Findings continued*	**Analysis** The Act on Freedom of Association in the Labour Market (2006) and Article 11 of the European Convention on Human Rights stipulate the freedom of association in the labour market. The Act protects the rights of workers in relation to their being members of workers' unions and prohibits any related discrimination in employing or dismissal of workers. In 1951, Denmark also ratified Convention 87 on the Freedom of Association and Protection of the Right to Organise and in 1955 Convention 98 on the Right to Organise and Collective Bargaining. It also respects the International Labour Organisation (ILO) reporting procedures. Freedom of association and organisation is guaranteed by law in Denmark and in the Universal Declaration of Human Rights which protects human rights and fundamental freedoms. This includes the right to join and form associations and participate in assemblies. **Enforcement and monitoring** Trade unions and individual workers report readily on any restrictions to the freedom of association or collective bargaining. The Danish Working Environment Authority – Arbejdstilsynet – enforces labour laws. The International Trade Union Confederation (ITUC) assigns Denmark a rating of 1 (on a scale from 1 to 5+, 1 being the highest and 5+ being the lowest) in the ITUC Global Rights Index 2022. This assessment is given for countries where collective labour rights are generally guaranteed, and only sporadic violations occur and are addressed. Workers can freely associate and defend their rights collectively with the government and / or companies and can improve their working conditions through collective bargaining. Violations against workers are not absent but do not occur regularly. Foreign service providers in Denmark shall register in the Registry for Foreign Service Providers (RUT-registeret), or face the risk of a fine of 10,000 kr. When companies have registered in the RUT registry, government authorities gain knowledge of the size of the company and the business area in which the services are provided, and the companies can then be subject to inspection by government authorities. In recent years companies in the forest-related sector have increasingly employed people under the Danish union agreement instead of foreign companies under the RUT register. Employers contracting workers that are under the Danish collective agreements shall respect the terms of the agreements e.g. in payments, leave, working hours and conditions. **Risk conclusion and justification** Danish labour legislation protects the right to association and bargaining. The enforcement of labour laws is good. Foreign companies/contractors shall be officially registered, and they are equally under the enforcement of Danish labour laws. Most employees in Denmark are covered by a collective agreement which specifies additionally the labour rules and engages trade unions in the supervision of their implementation. Based on the available information and the assumption that there is currently little activity relating to feedstock production being carried out by unregistered foreign contractors in Danish forests, the risk for this indicator has been assessed as low concerning all forests.
Means of verification	– Existing legislation – An international analysis of the legislation – Level of enforcement including registration obligation – Publicly available information

4.1.1 continued *Evidence reviewed continued*	– Danish constitution (foreningsfrihed). https://www.retsinformation.dk/eli/lta/1953/169 – Danish legislation: https://www.retsinformation.dk/ – Danish Working Environment Authority – Arbejdstilsynet and other authorities provide guidance for foreign employers: https://workplacedenmark.dk/ – Freedom of Association Act. (26.04.2006). https://www.retsinformation.dk/eli/lta/2006/359, Lov om foreningsfrihed på arbejdsmarkedet: https://www.retsinformation.dk/eli/lta/2006/424 – ILO NATLEX Database: https://www.ilo.org/dyn/natlex/ – ILO. Overview of ILO conventions ratified by Denmark: https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102609 (15 Jan 2023) – International Trade Union Confederation https://www.ituc-csi.org/ – ITUC Global Rights Index 2022: https://files.mutualcdn.com/ituc/files/2022-ITUC-Rights-Index-Exec-Summ-EN_2022-08-10-062736.pdf – Ministry of Employment, https://bm.dk/the-ministry-of-employment/ – Registry for Foreign Service Providers: https://erhvervsstyrelsen.dk/registrering-af-udenlandske-tjenesteydere-rut
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.1.2	**Forced or compulsory labour shall not be used.**
Findings	**Scale of assessment** Scope includes Danish citizens and immigrants (with working permits) employed to work in Denmark (excluding Greenland and the Faroe Islands). Immigrants without a working permit do not have workers' rights in the country and any work is a breach of the law on their and their employer's part. On the other hand, international and national laws prohibiting forced labour and protecting human rights apply. **Analysis** Denmark ratified Convention 29 in 1932 and Convention 105 on forced and bonded labour in 1958. Denmark adopted in 2008 the Order on the Protocol against the smuggling of migrants by land, sea and air, supplementing the United Nations Convention against Transnational Organized Crime. (Bekendtgørelse (2008:35), which also contributes to the control of illegal and potentially forced labour in today's conditions. The Working Environment Act (2010) is a framework act to promote health and safety in workplaces. The Act is the basis for companies to resolve health and safety issues with guidance from social organisations, and guidance and control by the labour inspectorate. Indirectly it is also linked to the conditions of potentially involuntary working conditions.

4.1.2 continued *Findings continued*	Workers who are tied to an employer only through the work contract and who are free to change employer are well protected against any abuse regarding underpayment or excessive working hours which are often characteristics of forced labour. For non-EU immigrant workers whose work permit is linked to a specific employer, there is a slightly higher risk of being forced to work under conditions that do not meet the terms of the collective agreement. Immigrants may also be in debt due to unreasonably high recruitment costs they have paid. This is a universal problem, and it is monitored in Denmark by NGOs and also by the authorities. Workers working in Denmark but employed by foreign companies may have the status of being posted workers and they are subject to the Act on Posting of Workers and consequently to the following Danish labour laws (examples): The Working Environment Act, The Equal Treatment Act, The Equal Pay Act, The Act Prohibition against Discrimination on the Labour Market, The Salaried Employees Act (paragraph 7, Section 9), and The Consolidation Act concerning Posting of Workers. The Danish Working Environment Authority – Arbejdstilsynet – maintains together with other authorities a website "Workplacedenmark.dk" that informs foreign workers on their rights and obligations. It also gives guidance on how to make complaints about possible breaches of the law. **Enforcement and monitoring** The International Trade Union Confederation (ITUC) assigns Denmark a rating of 1 (on a scale from 1 to 5+) in the ITUC Global Rights Index 2022. This assessment is given for countries where collective labour rights are generally guaranteed, and only sporadic violations occur. **Risk conclusion and justification** In Denmark, there is comprehensive labour legislation and strong traditions for collective labour contracts in different fields. The institutional framework and enforcement support their appropriate implementation. Danish citizens or immigrants with free work permits are well protected against forced labour (i.e. working hours or remuneration or other conditions are not respected). There is a minor risk of unfair working conditions for immigrants whose residence and work permit are linked to one specific employer and thus they are not in a position to look for a better job. Typically, immigrants have not worked in large numbers in the forestry or bioenergy sectors. Based on the available information, the risk for this indicator has been assessed as low concerning all forests.
Means of verification	– Existing legislation – Level of enforcement – Publicly available information
Evidence reviewed	– Arbejdstilsynet: Description of Working Environment Act: https://at.dk/en/regulations/working-environment-legislation/ – ILO NATLEX Database: https://www.ilo.org/dyn/natlex/ – ILO. Overview of ILO conventions ratified by Denmark: https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102609 – ITUC Global Rights Index 2022: https://files.mutualcdn.com/ituc/files/2022-ITUC-Rights-Index-Exec-Summ-EN_2022-08-10-062736.pdf – Ministry of Employment, Overview of applicable legislation: http://bm.dk/da/Love%20og%20Regler/Gaeldende%20love%20og%20regler.aspx

4.1.2 continued *Evidence reviewed continued*	– Sprangler, M. & Hvalkof, S. (2021). The Danish model of exploiting migrant workers: https://www.opendemocracy.net/en/beyond-trafficking-and-slavery/the-danish-model-of-exploiting-migrant-workers/ – Workplace Denmark: "Your rights as a posted worker". https://workplacedenmark.dk/regulations-on-posting/your-rights-as-a-posted-worker/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.1.3	**Child labour shall not be used.**
Findings	**Scale of assessment** Teenagers may work from the age of 13 onwards but they must have parental permission if aged under 18. The minimum age for full-time employment is 15 after completing nine years of compulsory education. **Analysis** Denmark ratified Convention 138 on the minimum age for workers in 1997 and Convention 182 on Worst Forms of Child Labour Convention in 2000 and has corresponding national legislation protecting children (e.g. The Childrens Act (2014). The Working Environment Act (2062/2021) is a framework act to promote health and safety at workplaces. It also gives special provisions for working conditions for persons below 18 years of age. According to the Act on respecting prohibition against discrimination in the labour market etc., salaries and access to certain jobs may be restricted for children below 15 years of age. Council of Children and Helplines to Ombudsman and Jordpatruljen are available for teenagers wanting to learn more about their rights. **Enforcement and monitoring** The Danish Working Environment Authority – Arbejdstilsynet – enforces labour laws. Child labour-related issues are also addressed by the social authorities. The International Trade Union Confederation (ITUC) assigns Denmark a rating of 1 (on a scale from 1 to 5+) in the ITUC Global Rights Index 2022. This assessment is given for countries where collective labour rights are generally guaranteed and only sporadic violations occur and are addressed. **Risk conclusion and justification** In Denmark, there is high enforcement of regulations relating to the work environment, for safety, minimum age of work, and hazardous work. There is no evidence of child labour in Denmark. Based on the available information, the risk for this indicator has been assessed as low concerning all forests.

4.1.3 continued *Means of verification*	– Existing legislation – Level of enforcement – Publicly available information
Evidence reviewed	– Business in Denmark: "Employment and dismissal – Working hours". https://businessindenmark.virk.dk/guidance/employment-and-dismissal/working-hours/ – Consolidation Act on the Employment of Young Workers. (06.04.2005). https://www.retsinformation.dk/eli/lta/2005/239 – Danish ratification of ILO Convention No. 138 on the minimum age for access to employment: https://www.retsinformation.dk/eli/ltc/1998/31 – Danish ratification of ILO Convention No. 182 on the prohibition of and immediate efforts to abolish the worst forms of child labour: https://www.retsinformation.dk/eli/ltc/2000/62 – EU Charter of Fundamental Rights (Article 32, Prohibition of child labour and protection of young people at work). https://fra.europa.eu/da/content/charterpedia – ILO NATLEX Database: https://www.ilo.org/dyn/natlex/ – ILO. Overview of ILO conventions ratified by Denmark: https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102609 – Promulgation of the Act on the implementation of parts of the Working Time Directive. (24.08.2004). https://www.retsinformation.dk/eli/lta/2004/896 – Work of young people subject to education (At-vejledning). https://at.dk/regler/at-vejledninger/undervisningspligtige-unges-arbejde-13-0-1/ – Working Environment Act (Chapter 10: Young people under 18). https://www.retsinformation.dk/eli/lta/2020/674
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.1.4	**Workers shall not be discriminated in hiring, remuneration, access to training, promotion, termination or retirement.**
FIndings	**Scale of assessment** The Law Prohibiting Discrimination in Labour Market (2017) states that direct and indirect discrimination are prohibited in the Danish labour market during hiring, employment and on termination. This law also applies to foreign businesses and posted workers in Denmark. The regulations prohibit discrimination and harassment on the grounds of race, skin colour or ethnic origin, religion or faith, sexual orientation, national or social origin, political views, age or disability. In the private sector, criteria for promotion, access to training or remuneration are not public information, therefore information on potential discrimination is not readily available if not disclosed by the employer's procedures or by the employee. In the public sector, more information is available which allows the assessment of potential discrimination.

4.1.4 continued *Findings continued*	**Analysis** In 1960, Denmark ratified Conventions 100 on Equal Remuneration and C 111 on Discrimination. The Act on the Prohibition of Differences of Treatment in the Labour Market prohibits discrimination and harassment on the grounds of race, colour of skin, religion or belief, political affiliation, sexual orientation, age, disability or national, social, or ethnic origin. An employer may not subject workers or applicants for vacant jobs to differences of treatment in their appointment, dismissal, transfer, promotion or in respect of pay and working conditions. The Consolidation Act on Equal Pay to Men and Women ensures that men and women receive equal pay for equal work. This means that men and women must receive the same pay if they perform the same work or if their work has the same value. The authorities also provide online access to file complaints with the Board of Equal Treatment on discrimination perceived as illegal. Filing a complaint is free and can be done on the National Board of Appeals website. The international commitments and national labour laws in Denmark ban discrimination related to work. The law covers a broad range of characteristics that may lead to discrimination. The threshold to report on discrimination is intended to be low. The SBP requirement specifies that there should be procedures to prevent discrimination e.g. in promotion or access to training. In the private sector, these issues are not strongly regulated by laws and thus they are not addressed by enforcement. Collective labour agreements may or may not address these issues. **Enforcement and monitoring** The International Trade Union Confederation (ITUC) assigns Denmark a rating of 1 (on a scale from 1 to 5+) in the ITUC Global Rights Index 2022. This assessment is given for countries where collective labour rights are generally guaranteed, only sporadic violations occur, and they are addressed. **Risk conclusion and justification** Overall, the regulations and collective agreements promote equal rights and non-discrimination in the labour market. There are also complaint mechanisms in place for authorities or to trade unions which decrease the risks of discrimination. Based on the available information, the risk for this category has been assessed as low concerning all forests.
Means of verification	– Existing legislation – Level of enforcement – Publicly available information
Evidence reviewed	– Danish model: https://bm.dk/arbejdsomraader/arbejdsvilkaar/den-danske-model/ – ILO. Overview of ILO conventions ratified by Denmark: https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102609 – ITUC Global Rights Index 2022: https://www.globalrightsindex.org/en/2022 – Life in Denmark: "Non-discrimination and equal treatment". https://lifeindenmark.borger.dk/working/equality-in-the-workspace/non-discrimination-and-equal-treatment

4.1.4 continued *Evidence reviewed continued*	– National Social Appeals Board (Ankestyrelsen). Complaint form (Klageskema – Ligebehandlingsnævnet). https://ast.dk/om-ankestyrelsen/blanketter/klageskema/klageskema – Promulgation of the Act on Prohibition of Discrimination in the Labor Market. (24.08.2017). https://www.retsinformation.dk/eli/lta/2017/1001 – Workplace Denmark: "Prohibition against discrimination". https://workplacedenmark.dk/en/working-conditions/prohibition-against-discrimination/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.1.5	**Wages paid to workers shall meet or exceed the legal minimum wage or where there is no statutory minimum wage industry norms shall be met or exceeded.**
Findings	**Scale of assessment** The labour market is – to a great extent – regulated by the various players in the labour market themselves, in contrast to regulation by legislation. Pay and working conditions are typically laid down by collective agreements concluded between trade unions and employers' organisations. Danish legislation does include minimum requirements for certain aspects e.g. the working environment, holiday, proof of employment, equal treatment, and equal pay. Denmark has not ratified ILO Convention 95 on Protection of Wages or Convention 131 on Minimum Wage Fixing which stipulates a minimum wage. In collective agreements, trade unions and employers' organisations agree at the end of every contract period on remuneration and other employee benefits. **Analysis** Employment conditions, including wages, can either be agreed upon or negotiated between the employee and the employer or negotiated through a collective agreement between unions and employer associations at national or industry levels. Neither Danish nor foreign companies are legally required to comply with or conclude a collective agreement. Overall, the coverage of collective bargaining is high. In bioenergy production, collective agreements are laid down in the wood chips industry but not in forestry operations. Company-level agreements are becoming more common in the private sector. In the public sector, in contrast, the central agreements between the unions and the three employers (central government, regional government and local government) are crucial in setting pay rates, although since the late 1990s a small part of the pay of public sector employees has also been determined through local bargaining. The Act on Equal Treatment of Men and Women with regards to Employment covers all types of workers in different situations (unemployed, on family leave, disabled etc.) The law is also applicable in relation to insurance and related financial services. According to the Holiday Act, holidays and payments for employees are regulated. An employee is entitled to holiday pay or salary during holidays.

4.1.5 continued *Findings continued*	Workers working in Denmark but employed by foreign companies may have the status of being posted workers and they are subject to the Act on Posting of Workers and consequently to the following Danish labour laws (examples): The Working Environment Act, The Equal Treatment Act, The Equal Pay Act, The Act Prohibition against Discrimination on the Labour Market, The Salaried Employees Act and The Consolidation Act concerning Posting of Workers. It is a condition of a work-based residence permit that posted or immigrant workers shall work under the terms of collective labour agreements. **Enforcement and monitoring** Companies hiring contractors or other suppliers are responsible for ensuring that the regulations and agreements on labour conditions and remuneration as well as payment of statutory fees are applied in the whole supply chain. Often employers request evidence of the fulfilment of statutory obligations as a contract term. Major organisations (e.g. Skovdyrkerforeningen Vestjylland, HedeDanmark/ HD Silva and Naturstyrelsen) contracting forest work prefer contractors that are registered in the Danish company registry, and they often apply supplier questionnaires to gain confidence that the contractor respects applicable laws and organisation's policies and principles. Collective agreements set the acceptable level of payment. The major trade union in the forestry sector is 3F. Foreign service providers in Denmark have to register in the Registry for Foreign Service Providers (RUT-registeret). When companies have registered in the RUT registry, government authorities gain knowledge of the size of the company and the business area in which the services are provided, and the companies can then be subject to inspection by government authorities. An increasing share of companies in the forest sector employ people with Danish union agreements and follow the obligations of the agreements. **Risk conclusion and justification** Denmark has a high level of enforcement of regulations relating to the working environment and this also includes registered foreign contractors. Most employees in Denmark are covered by a collective labour agreement and receive wages and benefits at the levels specified in these agreements. There is no legally determined minimum wage in Denmark. It cannot be ruled out that some forest workers receive average payments that do not meet the minimum requirements as specified in general in collective agreements. Note that the forestry sector does not have a collective agreement. However, based on information provided by a range of stakeholders and currently available evidence, it is assessed that the scale and impact of the violations do not constitute a specified risk in relation to the supply of feedstock for biomass production. Based on the available information there is currently very little activity relating to feedstock production being carried out by unregistered foreign companies.
Means of verification	– Existing legislation – Level of enforcement – Publicly available information

4.1.5 continued *Evidence reviewed*	– Arbejdstilsynet: "Description of Working Environment Act". https://at.dk/en/regulations/working-environment-legislation/ – Business in Denmark: "Employment and dismissal – The Danish Labour Market Model". https://businessindenmark.virk.dk/guidance/employment-and-dismissal/the-danish-labour-market-model/ – ILO. Overview of ILO conventions ratified by Denmark: https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102609 – Workplace Denmark: "Your rights as a posted worker". https://workplacedenmark.dk/regulations-on-posting/your-rights-as-a-posted-worker/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.1.6	**Working hours shall comply with legal requirements.**
Findings	**Scale of assessment** The EU's Working Time Directive defines the framework for regulations on working hours in Denmark. The country does not have a law on working hours. The working time is determined in the employment contract, which may be part of a collective agreement or a local agreement. As a general rule, working hours are regulated in a collective agreement, and in most areas, standard working hours are 37 hours per week. Special rules apply to workers under the age of 18. **Analysis** According to The Act on Implementation of Parts of the Working Time Directive there is a daily rest period of a minimum of 11 consecutive hours, a break if the working day exceeds 6 hours; one day off per week, which must be preceded by a daily rest period. There must be no more than 6 days between the 2 days off; weekly working hours may not exceed an average of 48 hours, including overtime; a night worker may not work more than an average of 8 hours per 24-hour period. The Danish Working Environment Act stipulates that the employee is entitled to 11 hours of rest within a period of 24 hours and that the employee is entitled to a weekly day and night time off. During four months, the average working time per week cannot exceed 48 hours (EU Directive). If the employer suggests overtime work with justified reasons, the employee cannot decline it without a valid reason. The caps for weekly work apply also to overtime work. **Enforcement and monitoring** The salary calculation is based on working time and the employer is responsible to monitor the time worked. Employment law rules and principles are enforced by several government bodies within their respective areas of competence. **Risk conclusion and justification** Legislation on the working environment sets limits to the maximum working hours and stipulates compulsory resting times. The employer is responsible for not exceeding the allowed working time. The institutional framework to enforce the laws on appropriate working conditions is in place. Based on this situation the risk breaching of the regulations on working hours is deemed low concerning all forests.

4.1.6 continued *Means of verification*	– Applicable legislation – Enforcement Working Environment Authority under the Ministry of Employment – Public information on labour conditions
Evidence reviewed	– Business in Denmark: "Employment and dismissal – Working hours". https://businessindenmark.virk.dk/guidance/employment-and-dismissal/working-hours/ – Consolidation Act on rest periods and rest days. (23.05.2002). https://www.retsinformation.dk/eli/lta/2002/324 – IDA: "Legal Advice and Security – Working hours – Rules and regulations". https://english.ida.dk/working-hours – The Act on Implementation of Parts of the Working Time Directive. (2004). https://www.retsinformation.dk/eli/lta/2004/896 – Working Environment Act. (16.11.2021). https://at.dk/en/regulations/working-environment-act/ – Workplace Denmark: "Pay and working hours for posted workers". https://workplacedenmark.dk/working-conditions/pay-and-working-hours/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.1.7	**Workers shall have access to health care provisions, sickness benefits, retirement benefits, invalidity benefits, death benefits, workers' compensation.**
Findings	**Scale of assessment** Denmark has an extensive public healthcare system that offers free consultation and treatment from a general practitioner. Legal workers in Denmark are covered by the Danish health insurance system. Most examinations and treatments are free with a health insurance card. Danish regulations require that co-operation on occupational health and safety takes place through a Health and Safety Organisation (in Danish AMO). The task of the Health and Safety Organisation is to help ensure a good working environment and prevent occupational health and safety problems. In principle, employees get their health services through public health care, but companies may provide voluntary health insurance and thus give access to faster and possibly improved services offered by private companies. Part of the salary is paid to a pension fund. Employees may also decide to which fund the money is allocated. State pensions (folk pension, senior pension or pre-pension) may complement work-based pensions in case the accumulated sums are not sufficient for living. The pension age is 66–68 years. Social security insurance covers work-related health problems and their treatments. It is funded by workers and by employers. **Analysis** The Minister of Employment may lay down regulations requiring medical examinations for the sectors or groups of employees whose work involved a risk to the health. The employer is responsible for the costs (Working Environment Act Part 11).

4.1.7 continued *Findings continued*	Sickness leave is in general paid by employers. Social security (social securing, pensions, taxes etc.) is funded by workers and employees and the fees are deducted from the gross salary. It is important to verify that the employer has registered the workers and pays the fees as appropriate and provides pay slips to the employee. A pension scheme (ATP) is enforced by law. It is funded by both employer (⅔) and the employee (⅓). Labour market insurance (AES) is mandatory for all private and public sector employers. It funds and pays compensation for recognised occupational diseases. AES is funded by employer contributions. Additional social fees include e.g. employer's payments of pension fees to the unemployment fund, maternity/paternity leave fund, occupational injury insurance and the fund securing payment for foreign workers in Denmark (AFU). **Enforcement and monitoring** Danish employers are liable to pay various social costs for their employees and deduct the employee contributions from the gross salary and allocate the money to the statutory funds. The employer shall report regularly on the taxes and labour market contributions paid from the employee's salary and by the employer. Tax agencies, social funds and transparency in companies' accounting systems contribute to the efficient enforcement of the payment of social obligations by employers and employees. **Risk conclusion and justification** The institutional framework is strong in Denmark to collect and ensure social security in the forms of pensions, state social insurance or access to health care (state or occupational) if an employee is registered as appropriate and thus employer is entitled to pay the required fees. The benefits are linked to formal labour relations where all incomes are also reported to the authorities. There is no specified risk with biomass producers who are responsible employers and require that contractors in the supply chain obey the law concerning all forests.
Means of verification	– Legislation – Description of the pension system, occupational health systems – Enforcing procedures
Evidence reviewed	– Borger.dk: "Om pension" (Danish pension system). https://www.borger.dk/pension-og-efterloen/Pensionssystemet-i-Danmark/Om-pension – Danish Tax Agency (Skattestyrelsen). https://skat.dk/ – Life in Denmark: "Healthcare when working in Denmark". https://lifeindenmark.borger.dk/healthcare/health-insurance/healthcare-when-working-in-denmark – Nordic Co-Operation: "Danish retirement pension". https://www.norden.org/en/info-norden/danish-retirement-pension – Working Environment Act. (16.11.2021). https://at.dk/en/regulations/working-environment-act/ – Workplace Denmark: "Requirements for health and safety cooperation". https://workplacedenmark.dk/health-and-safety/health-and-safety-organisation/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

4.1.7 continued *Findings continued*	Sickness leave is in general paid by employers. Social security (social securing, pensions, taxes etc.) is funded by workers and employees and the fees are deducted from the gross salary. It is important to verify that the employer has registered the workers and pays the fees as appropriate and provides pay slips to the employee. A pension scheme (ATP) is enforced by law. It is funded by both employer (⅔) and the employee (⅓). Labour market insurance (AES) is mandatory for all private and public sector employers. It funds and pays compensation for recognised occupational diseases. AES is funded by employer contributions. Additional social fees include e.g. employer's payments of pension fees to the unemployment fund, maternity/paternity leave fund, occupational injury insurance and the fund securing payment for foreign workers in Denmark (AFU). **Enforcement and monitoring** Danish employers are liable to pay various social costs for their employees and deduct the employee contributions from the gross salary and allocate the money to the statutory funds. The employer shall report regularly on the taxes and labour market contributions paid from the employee's salary and by the employer. Tax agencies, social funds and transparency in companies' accounting systems contribute to the efficient enforcement of the payment of social obligations by employers and employees. **Risk conclusion and justification** The institutional framework is strong in Denmark to collect and ensure social security in the forms of pensions, state social insurance or access to health care (state or occupational) if an employee is registered as appropriate and thus employer is entitled to pay the required fees. The benefits are linked to formal labour relations where all incomes are also reported to the authorities. There is no specified risk with biomass producers who are responsible employers and require that contractors in the supply chain obey the law concerning all forests.
Means of verification	– Legislation – Description of the pension system, occupational health systems – Enforcing procedures
Evidence reviewed	– Borger.dk: "Om pension" (Danish pension system). https://www.borger.dk/pension-og-efterloen/Pensionssystemet-i-Danmark/Om-pension – Danish Tax Agency (Skattestyrelsen). https://skat.dk/ – Life in Denmark: "Healthcare when working in Denmark". https://lifeindenmark.borger.dk/healthcare/health-insurance/healthcare-when-working-in-denmark – Nordic Co-Operation: "Danish retirement pension". https://www.norden.org/en/info-norden/danish-retirement-pension – Working Environment Act. (16.11.2021). https://at.dk/en/regulations/working-environment-act/ – Workplace Denmark: "Requirements for health and safety cooperation". https://workplacedenmark.dk/health-and-safety/health-and-safety-organisation/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

4.1.8	**Training shall be provided for all workers to allow them to implement the conditions set out in all elements of the SBP standards relevant to their responsibilities.**
Findings	**Scale of assessment** Generally, forest managers and workers/landscape craftsmen in Denmark have a high level of education. Basic training for a skilled forest worker lasts three years. The curriculum includes forest mechanisation, ergonomics, health and safety, forestry techniques, biology and economics. There is also an option for acquiring formal recognition as a skilled forest worker through 1–2-week courses. In both cases, the Ministry of Education approves the curriculum. Shorter and more specific courses are also available, and even unskilled forest workers and contractors typically attend one or more training events every year. However, there are no qualification criteria for forest workers, and employers have the responsibility to ensure that workers have adequate competence for the work they are performing. Competence in SBP sourcing standards will require special training. **Analysis** The education system in forestry and nature management is good and professionals with a broad understanding of sustainable forestry are available for management and planning operations. Workers educated in Denmark also have training in responsible and sustainable management. It is then the responsibility of biomass producers to ensure that all forest workers including foreign workers have adequate competence. The policies, commitments and internal control mechanisms in a responsible organisation will address the responsible management through the supply chain. The SBP requirements exceed the statutory requirements for forest management in Denmark. **Enforcement and monitoring** Supply chain control on the commitments to comply with SBP requirements, second-party and third-party audits and certifications. **Risk conclusion and justification** The level of professional training for forest work is high in Denmark. For this reason, the risk is classified as low concerning all forests.
Means of verification	– Training of forest and landscape professionals – Descriptions of the training program
Evidence reviewed	– The University of Copenhagen: “Skov- og naturtekniker (EUD)” (Information about the education, courses and training offered by the forestry school). https://skovskolen.ku.dk/skov-og-naturtekniker/

4.1.8 continued *Risk rating*	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.1.9	**Mechanisms shall be in place for resolving grievances and disputes in the workplace.**
Findings	**Scale of assessment** Disputes related to work, payments, benefits and working conditions. **Analysis** The disputes should be discussed at the workplace with the management of the employer. Workers may elect workers' representatives e.g., for discussing with management on health and security and working condition-related issues, Workers may also elect a trade union representative among the staff. The representative can address issues related to payments and dismissal together with the workers. Trade unions also provide guidance and support in case of grievances, in major cases, they can also participate in the mediation process. The elected workers' representatives are protected from dismissal which allows them to bring up and defend issues that are difficult for the employer. If there is evidence of likely illegal activities by the employer or other party at the workplace, a worker may file a formal complaint to National Social Appeals Board and / or Work Environment Authority (Arbejdstilsynet). Links leading to making formal complaints are available online publicly. **Enforcement and monitoring** The disputes related to work conditions shall be resolved according to administrative procedures and labour legislation. The prevailing practice is to include additional dispute resolutionrelated statements of clarification in the working agreements. In addition, trade unions can assist in resolving disputes over working conditions and can use their procedures and agreements. For illegal discriminatory treatment, one can file a complaint with the Board of Equal Treatment. Filing a complaint is free. If your claim is upheld one is entitled to compensation. The Board of Equal Treatment is contacted by writing to the National Social Appeals Board at ast@ast.dk. Everyone can complain to the Work Environment Authority (Arbejdstilsynet) if they believe or suspect that the working environment regulation has been violated. This also applies if there is a suspicion that a foreign company performing work in Denmark violates the working environment rules. **Risk conclusion and justification** The Danish labour market has robust procedures to address different levels of grievance and disputes in the workplace. Election of workers' representatives with the special mandate and related committees e.g. in working conditions and safety allows open discussion at the workplace. The processes are backed by trade unions and the authorities. Individual workers, Danish and foreign, have a low threshold to file a complaint on illegalities. The risk of not addressing the complaints as appropriate is deemed low. Based on the reviewed evidence it is concluded that there is a low risk of non-compliance with the requirement concerning all forests.
Means of verification	– Existing legislation – Best Practices to address grievances in the labour market – Accessibility to file complaints

4.1.9 continued *Evidence reviewed*	– Life in Denmark: "Complaint about Violations of the Working Environment Act". https://lifeindenmark.borger.dk/working/work-rights/complain-about-violations-of-the-working-environment-act – Work in Denmark: "Unfair Treatment" (Guidance on workers' rights). https://www.workindenmark.dk/working-in-denmark/terms-of-employment/unfair-treatment – Working Environment Act. (16.11.2021). https://at.dk/en/regulations/working-environment-act/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.1.10	**Safeguards shall be put in place to protect the health and safety of workers by developing, communicating and implementing policies and procedures.**
Findings	**Scale of assessment** Workers' health and safety are well-regulated in the Danish labour market. The Framework Act on Working Environment aims at creating: – A safe and healthy physical and psychosocial working environment which is always in accordance with the technical and social development of society, and – The basis on which enterprises themselves will be able to solve issues relating to health and safety under the guidance of the employers' and workers' organisations, and the guidance and supervision of the Working Environment Authority. Complementary laws give specified rules to protect the health and safety of workers. **Analysis** The Work Environment Act is the basis for companies to resolve health and safety issues with guidance from social organisations and guidance and control by the Labour Inspectorate. The employer has to ensure that working conditions are acceptable according to health and safety and has to develop a written assessment of the health and safety of the working environment (in Danish; arbejdsmarkedspladsvurdering, APV). The type of work and the size of the organisation must be considered, and the APV shall be revised either when organisational changes occur or every third year. The APV shall be accessible to management, employees, and the supervising authorities. Denmark has ratified Convention 148 on the working environment and Convention 155 on occupational health and safety. In 2021 the number of reported work accidents increased, but many of them were due to the COVID-19 pandemic and were not linked to forest work. However, the agriculture, forestry and fishing sectors were among the sectors with the highest death cases (6 persons in 2021) due to work-related accidents.

4.1.10 continued *Findings continued*	The International Trade Union Confederation (ITUC) assigns Denmark a rating of 1 (on a scale from 1 to 5+) in the ITUC Global Rights Index 2022. This assessment is given for countries where collective labour rights are generally guaranteed, and only sporadic violations occur. The health and safety conditions are sufficient to protect workers in relation to the harvest of biomass feedstock in Danish forests when this work is carried out by Danish workers or Danish contractors. Mandatory registration of foreign companies operating in Denmark (RUT register) gives relevant government authorities information on their size and operations and they are equally subject to inspections of authorities on the work environment. In general, there is a relatively extended focus on the work environment and safety in Denmark. The employer is required by the Work Environment Act to correctly instruct the workers on the use of e.g. machinery. The risk is also low because employees in Denmark are aware of their rights and of the legislation related to health and safety. **Enforcement and monitoring** Companies are required to evaluate their workplace, but both companies and individual entrepreneurs are subject to health and safety legislation and can be controlled by the Labour Inspectorate. Injuries and safety risks have to be reported to authorities by the employer/health care. **Risk conclusion and justification** In Denmark there is high enforcement of regulations relating to the working environment and workers' health and safety, this also includes registered foreign contractors. Based on the available information the risk for this indicator has been assessed as low for all forests.
Means of verification	– Existing legislation – Level of enforcement – Publicly available information
Evidence reviewed	– Arbejdstilsynet: "Ny opgørelse: Antallet af anmeldte arbejdsulykker er steget igen i 2021 pga. COVID-19". https://at.dk/nyheder/2022/04/ny-opgoerelse-antallet-af-anmeldte-arbejdsulykker-er-steget-igen-i-2021-pga-covid-19/ – ILO. Overview of ILO conventions ratified by Denmark. https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:102609 – ITUC Global Rights Index 2022: https://www.globalrightsindex.org/en/2022 – Registry for Foreign Service Providers: https://virk.dk/myndigheder/stat/ERST/selvbetjening/Register_of_Foreign_Service_Providers_RUT/ – Working Environment Act. (16.11.2021). https://at.dk/en/regulations/working-environment-act/
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

Criterion 4.2 – Feedstock sourcing benefits communities

Element	Description and analysis
4.2.1	**Negative social and community impacts shall be identified and avoided.**
Findings	**Scale of assessment** Avoidance of negative impacts due to biomass procurement to local communities can be regulated e.g. by environmental legislation and spatial planning. Municipalities are the main spatial planning authorities, and municipal plans are legally binding for authorities and the main central cross-sector planning instruments. Local authorities are responsible for municipal and local planning; implementation of policies, plans and programmes; and issuance of most environmental permits and related inspections. Environmental impact assessment is not required for forestry activities, but they shall be in place in construction projects. **Analysis** Denmark has established legislation and procedures for land use planning. The Forest Act (2019) stipulates forest management activities on forest land and the Danish Environmental Protection Act amended in 2022 sets restrictions for any polluting activity. The Environmental Objectives Act (2017) governs protected areas including the management of Natura 2000 areas. Denmark has a well-functioning environmental governance and management system characterised by a high level of co-operation and consensus. It applies socio-economic assessments and risk-based inspection systems. **Enforcement and monitoring** Environmental authorities enforce forestry and environmental legislation. Municipalities control land use and compliance with the relevant land use plans, that reflect the objectives of local development. **Risk conclusion and justification** The land-use planning and implementation are regulated by relevant legislation and enforcement procedures. For major interventions, an environmental impact assessment with consultations shall be made. Forest operations alone do not require consultations. Based on the current information, the risk for negative social impacts due to forestry operations is deemed to be low for all forests.
Means of verification	– Current legislation on land use planning and environmental impact assessment
Evidence reviewed	– Environmental Protection Act. (19.01.2022). https://www.retsinformation.dk/eli/lta/2022/100 – Environmental Objectives Act. (26.01.2017). https://www.retsinformation.dk/eli/lta/2017/119 – Environmental Protection Agency: "Danish regulations". https://eng.mst.dk/trade/industry/environmental-inspection/danish-regulations/ – Forest Act (28.03.2019). https://www.retsinformation.dk/eli/lta/2019/315 – OECD: "OECD Environmental Performance Reviews: Denmark 2019. Chapter 2. Environmental governance and management". https://www.oecd-ilibrary.org/sites/3a03e006-en/index.html?itemId=/content/component/3a03e006-en

4.2.1 continued *Evidence reviewed continued*	– Spatial Planning Act. (01.07.2020). https://www.retsinformation.dk/eli/lta/2020/1157 – The Biodiversity Information System for Europe: "Green Infrastructure in Denmark". https://biodiversity.europa.eu/countries/denmark/green-infrastructure
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.2.2	**Feedstock sourcing shall positively contribute to the local economy, including employment.**
Findings	**Scale of assessment** The number of people working in the forestry sector is below 20,000 persons which is only around 0.1% of the workforce. Locally, forest work and related other services may be an important income generator. **Analysis** Biomass with their origin in Danish forests is mainly supplied through domestic supply chains to energy plants (kraft- varmeværker) in Denmark. The value of wood and chips produced for energy was EUR 79.4 million in 2019 and the forestry sector provided jobs for 5,590 workers. Biomass production provides work opportunities to forest owners, forest contractors and the transport sector that engages local entrepreneurs. The logging and processing of biomass (wood chips) are carried out mainly by Danish entrepreneurs. Biomass production also contributes to more intensive management of forests which increases the production of commercial wood. **Risk conclusion and justification** The biomass industry provides employment and income opportunities to local communities. Based on the reviewed evidence, it is concluded that there is a low risk of non-compliance with the requirement for all forests.
Means of verification	– Public information – Statistics
Evidence reviewed	– Danmarks statistik: "Home page". https://www.dst.dk – Energy Agency: "Home page". https://ens.dk/en – Nord-Larsen, T., Johannsen, V. K., Riis-Nielsen, T., Thomsen, I. M., Bentsen, N. S., Jørgensen, B. B. (2023). Skovstatistik 2021. Institut for Geovidenskab og Naturforvaltning. 60 s. – UNECE/FAO. (2020). Forest sector workforce in the UNECE region: Overview of the social and economic trends with impact on the forest sector. https://unece.org/DAM/timber/publications/2020/DP-76.pdf
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

4.2.3	**Food, water supply or high conservation values (HCV) that are essential for the fulfilment of basic needs of communities shall be maintained or enhanced.**
Findings	**Scale of Assessment** Subsistence needs for local communities are assessed as not applying to Denmark. The Forest Act and other legislation guiding land use planning and protecting nature and water resources provide safeguards for local communities and the environment (see SBP Benchmark 2.1.2). HCV values may be threatened by unsustainable biomass production. **Analysis** Danish forests have been surveyed by the Department of Geosciences and Natural Resource Management at Copenhagen University through a sampling methodology and documented under the Danish National Forest Inventory (NFI) hosted by The Danish Nature. These areas are mapped and available to the public through the website Danmarks Miljøportal (http://arealinformation.miljoeportal.dk/distribution/). By law, HCVs are taken into consideration in land use planning and forestry activities. Different sources of biomass feedstock share properties with regard to the presence, mapping and protection of HCVs (see SBP Benchmark 2.1.2 for detailed assessment). **Enforcement and monitoring** See SBP Benchmark 2.1.2. **Risk conclusion and justification** There is a low risk of non-compliance with this SBP requirement because the potential negative impacts of biomass procurement on the basic needs of subsistence of local communities are low for all forests.
Means of verification	– See SBP Benchmark 2.1.2
Evidence reviewed	– See SBP Benchmark 2.1.2
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

4.2.4	**Legal, customary, and traditional tenure and use rights of Indigenous Peoples and local communities related to the Supply Base shall be identified, documented, and respected.**
Findings	**Scale of assessment** This Benchmarking assessment covers only Denmark, and it does not apply to Greenland or Faroe Islands. In Denmark, there are no indigenous communities of Inuit people who maintain their traditional livelihoods in Denmark. **Analysis** The issues related to legal, customary, and traditional tenure and use rights of indigenous people do not apply to Denmark. The following discusses forest use rights for the general public, including local communities. According to the Proclamation on the public's access to nature (2016), the public has the right to access both public and private forests by foot, bicycle and horseback (under specified conditions). There is no access within a 50 metre radius around houses. The gathering of berries and other selected forest products is also permitted. There is no general right to collect firewood. This is only permissible following an agreement with the forest owners. If the forest area is used for commercial purposes, the use shall be based on an agreement with the landowner. **Enforcement and monitoring** Municipalities deal with cases where there are unreasonable restrictions to free access to forests. According to a 2014 report from the Outdoor Council, there are no indications of systemic conflicts with forest owners with the same report stating that 97% of visitors are happy with their visit to the forests and mainly use the forest for recreational purposes. **Risk conclusion and justification** The risk for violation of local communities' use rights is assessed as low concerning all forests.
Means of verification	– Customary use rights are identified and documented – Appropriate mechanisms exist to resolve disputes – Agreements exist regarding these rights
Evidence reviewed	– Danish Outdoor Council. (2014). Danskernes brug af nature – og omfanget af generende oplevelser i mødet med andre brugere. https://friluftsraadet.dk/om-os/viden-fakta-om-friluftsliv/danskernes-brug-naturen – Proclamation on the public's access to travel and stay in nature. (27.06.2016). https://www.retsinformation.dk/eli/lta/2016/852
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

4.2.5	**Mechanisms shall be in place for resolving grievances and disputes, relating to tenure and use rights of the forest and other land management practices.**
Findings	**Scale of assessment** Tenure and use rights, labour-related conflicts. **Analysis** Grievances and disputes, including those relating to tenure and usage rights, forest management practices, contracting and work conditions, are regulated by legislation, namely, the Constitution, the Law of Obligations Act, and the Labour Code. The detailed procedures, duties and responsibilities of involved persons are defined in the legislation. The legislation and justice system provides a route for appeal should people be dissatisfied with the outcome of the dispute resolution process. Land use conflicts may be a rising issue in Denmark because people and society have multiple objectives for land use varying from housing, industry, and transport development to agricultural or forest production or nature conservation and recreation. National, regional and municipal planning outline the land use and each planning level has its own complaints mechanisms. The challenge is that in a densely populated country like Denmark, most land areas could be under some type of development which is not accepted by society. The disputes related to work conditions shall be resolved according to administrative procedures and labour legislation. The prevailing practice is to include additional dispute resolution related statements of clarification in the working agreements. In addition, trade unions assist in resolving disputes over working conditions and can use their procedures and agreements. **Enforcement and monitoring** The Danish Cadastre Office maintains a register on land ownership in Denmark. It has procedures to provide information for any conflict related to land tenure rights. The Working Environment Agency, Arbejdstilsynet: Hotline for offensive behaviour or complaints. It carries out inspections at enterprises – including foreign enterprises with employees – to check that their health and safety conditions are in order. It also provides guidance and makes agreements with enterprises to fix problems. **Risk conclusion and justification** Based on the reviewed evidence it is concluded that there is a low risk of noncompliance with the requirement for all forests.
Means of verification	– Existing legislation – Level of enforcement – Collective agreements – system

4.2.5 continued *Evidence reviewed*	– Danish Board of Technology: "Citizens' priorities of Denmark's land use in the future". https://tekno.dk/article/citizens-priorities-of-denmarks-land-use-in-the-future/?lang=en – Danish Geodata Agency: "Danish Cadastre Office". https://eng.gst.dk/danish-cadastre-office
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**
4.2.6	**Where Indigenous Peoples' rights are identified in the Supply Base, and Free Prior and Informed Consent (FPIC) has not been achieved for the proposed and planned activities, a consultation and, if required, accommodation process shall be put in place.**
Findings	**Scale of assessment** This RRA Revision covers the territory of Denmark excluding Greenland and the Faroe Islands. The Territory of Denmark does not have any recognised indigenous community and thus this indicator does not apply. **Analysis** Not applicable. **Enforcement and monitoring** Not applicable. **Risk conclusion and justification** Not applicable.
Means of verification	Not applicable
Evidence reviewed	Not applicable
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

4.2.7	**Designated cultural heritage sites shall be preserved.**
Findings	**Scale of assessment** There are seven UNESCO World Heritage Sites in Denmark and three in Greenland. All the sites in Denmark are either cultural heritage sites or coastal biospheres. **Analysis** National and regional/local heritage sites are identified and protected by laws and regulations. Very few heritage sites are located in forest areas. The Nature Conservation Act provides protection, improvement and restoration of cultural heritage sites within the natural areas. Municipalities have also the responsibility to consider heritage sites in land-use planning. **Enforcement and monitoring** National Heritage Agency and the Danish Nature Agency enforce and regularly monitor the relevant legislation. **Risk conclusion and justification** Based on the information that most heritage sites are in cultural and heavily modified landscapes and that they are well mapped, the risk of damaging them in biomass production is deemed low for all forests.
Means of verification	– Existing legislation – Level of enforcement
Evidence reviewed	– EUI: "Denmark – Danish Cultural Heritage legislation as of July 2010". https://www.eui.eu/Projects/InternationalArtHeritageLaw/Denmark – Nature Protection Act. (04.10.2022). https://www.retsinformation.dk/eli/lta/2022/1392 – UNESCO Heritage Sites: "Denmark – UNESCO World Heritage Convention". https://whc.unesco.org/en/statesparties/dk
Risk rating	**Forests covered by Danish Forest Act: Low risk** **Forests not covered by Danish Forest Act: Low risk**

Annex 2 List of experts consulted and contacts of Working Body

List of experts consulted and contacts of Working Body

Expert	Affiliation & role
Dr Sepul Barua	Team Leader and Co-ordinator of the Working Body. Risk assessment expert with a focus on SBP RRA indicators under Principles 1 (feedstock is legally sourced) and 2 (feedstock sourcing does not harm the environment); Senior Consultant and Forest Economist at Indufor.
Mr Anders Bjørnkjær-Nielsen	Working Body Member. Danish forestry, certification, and bioenergy expert.
Ms Hanna Nikinmaa	Working Body Member. Certification and sustainability expert with a focus on SBP RRA indicators under Principle 4 (feedstock sourcing benefits people and communities); Senior Advisor at Indufor.
Ms Saija Papunen	Working Body Member. Forest Inventory and GIS expert with a focus on SBP RRA indicators under Principle 3 (feedstock is only sourced from supply bases where the forest carbon stock is stable or increasing long term); Analyst at Indufor.
Dr Thomas Nord-Larsen	Senior Scientist at Forest & Landscape, Copenhagen University. Responsible for the Danish National Forest Inventory and several projects related to forest growth and forest growth modelling.
Ms Nora Skjernaa Hansen	Expert working at the Danish Energy Agency.
Mr Bo Larsen	Expert working at the Danish Energy Agency.
Mr Rabins Gaudel	Forest Resources Mapping Expert; Consultant at Indufor.

Working Body: Indufor Group
Co-ordinator: Dr Sepul Barua sepul.barua@induforgroup.com +358 50 331 8217

Annex 3 List of publications used

Publications used

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Annex 4 List of Stakeholders

No.	Organisation	Type of organisation
1	3F (Fagligt Fælles Forbund)	Labour Union
2	92 Gruppen	Environmental NGO coalition
3	BAT Kartellet	Trade Union organisation
4	Biodiversitetsrådet	Biodiversity Council
5	Biomass auctions	Biomass auctions company
6	Concito	Environmental think tank
7	Copenhagen University	Research and education
8	Danish District Heating Association (Dansk Fjernvarme)	Association of CHPs
9	Danish Forest Association (Dansk Skovforening)	The Danish Forest Association
10	Danish Society for Nature Conservation	Nature conservation and environmental organisation
11	Dansk Ornitologisk Forening	Bird conservation association
12	DM&E (Dansk Skoventreprenørforening)	Forest entrepreneurs' association
13	DSHwood	Large wood and chip trader
14	Energistyrelsen	Danish Energy Agency
15	Friluftsrådet	Nature association
16	FSC Denmark	Certification scheme
17	Gartneri-, Land- og Skovbrugets Arbejdsgivere	Employer association for horticulture, agriculture and forestry
18	Green Power Denmark	Green energy association

Annex 4 List of Stakeholders continued

No.	Organisation	Type of organisation
19	Green Transition Denmark (Det Økologiske Råd)	NGO
20	HedeDanmark	Nature services company
21	Hofor	Large scale CHP
22	INBIOM	Bioresources company
23	Naturstyrelsen	Government's nature conservation agency
24	NOAH	Environmental NGO
25	PEFC Denmark	Certification scheme
26	Preferred by Nature	Certification body
27	Skovdyrkerforeningen, Midt	Forest growers association
28	Vedvarende Energi	Danish Ministry of Climate, Energy and Utilities
29	Verdens Skove	Environmental NGO
30	WSP	Certification body
31	WWF Denmark	Environmental NGO
32	Ørsted	Large scale CHP
33	Træ og Møbel Industrien	Industry body
34	Danske Maskinstationer og	Industry body

Annex 5 Stakeholder consultation report

Stakeholder consultation report

The draft SBP RRA Update for Denmark with a cover letter was sent by email to 34 stakeholders (see Annex 4) on April 5, 2023. The cover letter can be seen below. A reminder email was sent to the stakeholders on April 21, 2023. The reminder email mentioned that the forests not covered by the Danish Forest Act (approximately 30% of the forest area in Denmark) would also be integrated into the RRA Update for Denmark in the revised version.

The cover letter used for requesting feedback from the stakeholders

Dear Recipient,

Greetings from Indufor Oy in Helsinki, Finland!

Indufor is an international forestry consultancy (www.induforgroup.com). The Sustainable Biomass Program (SBP) appointed Indufor to update SBP's Regional Risk Assessment (RRA) for Denmark, Version 1.0 which was published in June 2017.

SBP RRA Procedure requires conducting consultation with relevant stakeholders on the draft RRA Update for Denmark – that Indufor prepared under SBP's guidance- before a revised draft can be prepared. As a valued stakeholder, I am reaching out to you to request your feedback on the draft RRA Update for Denmark (attached herewith). Information about SBP and the background, purpose and scope of the RRA Update for Denmark are given below.

May I request you give your feedback on the attached draft SBP RRA Update for Denmark by May 5, 2023? The feedback can be given to:

Dr. Sepul Barua – sepul.barua@induforgroup.com or
Mr. Anders Bjørnkjær-Nielsen – abn@b4trees.dk / +45 22 22 00 15.

Thank you so very much.

Best regards,

Sepul Barua
Anders Bjørnkjær-Nielsen

Sustainable Biomass Program (SBP)

The Sustainable Biomass Program (SBP) is a certification scheme designed for woody biomass used in industrial, large-scale energy production. SBP has developed a certification scheme to provide assurance that woody biomass is sourced both legally and sustainably allowing companies in the biomass sector to demonstrate compliance with regulatory requirements, as a minimum. The SBP certification scheme has been designed by using a risk-based approach. This requires SBP certificate holders to focus their efforts on the indicators of SBP Standard 1 that have been identified to represent a specified risk in their supply base.

Background to SBP RRA update

The SBP system allows two pathways to conduct the risk assessment – either each certification holder develops their assessment (called Supply Base Evaluation – SBE) or a regional risk assessment (RRA) is developed by experts and is required to be used by all certificate holders, removing the burden of each certificate holders to develop their own SBE. In this case, all certificate holders active in the geographic region must design their SBP certification management system based on the approved RRA.

As of March 2023, SBP has approved six RRAs covering the following countries/regions: Latvia, Lithuania, Estonia, Denmark, British Columbia and Quebec in Canada. There are two other RRAs (i.e. the Province of New Brunswick, Canada, and Portugal) in the pipeline (SBP-endorsed Regional Risk Assessments – Sustainable Biomass Program (sbp-cert.org)).

All SBP standards (Standards 1–6) have been updated on March 16, 2023, following a comprehensive review process. Like other standards, the criteria and indicators of the SBP Standard 1: Feedstock Compliance Standard is updated to version 2.0 (v2.0) on 16 March 2023.

Indufor Oy is appointed by SBP as the Working Body to update the RRA for Denmark, Version 1.0 (published in June 2017) following the updated SBP Standards.

Purpose and scope of RRA update for Denmark

Each SBP RRA is valid for a certain period of time and needs to be updated after the end of that period. The SBP RRA Update for Denmark updates the RRA for Denmark, Version 1.0 which was published on 29 June 2017. The updating is done following SBP RRA Procedure Version 1.2 and the SBP Standard 1: Feedstock Compliance Standard, Version 2.0 (March 16, 2023).

The geographical scope of this RRA Update covers the entire territory of Denmark (excluding Greenland and the Faroe Islands). As in the original RRA of Denmark (June 2017), this SBP RRA Update covers only wood-based primary feedstock from forests and trees. Residues from wood processing industries including, all other secondary or tertiary feedstock as well as imported feedstock are excluded from this RRA update as in the original RRA of Denmark.

Annex 5 Stakeholder consultation report continued

The RRA Revision covers only this domestically sourced wood-based feedstock originating from the legally-defined forests, i.e. the forests covered by the Danish Forest Act only.

Forests and tree-covered areas that are not covered by the Act are excluded from this RRA Revision.

A total of 17 stakeholders out of 34 initially contacted responded to the request to provide feedback on the draft RRA Update for Denmark. This means the response rate was about 50%. 13 stakeholders gave comments, whereas four stakeholders (NOAH, WSP, the Danish Society for Nature Conservation and the Danish Outdoor Council) did not give any comments. A total of 10 stakeholders responded to the request to provide feedback on the revised draft RRA update. The stakeholder comments are presented in the following table.

Stakeholder	Comment	Response
On Draft RRA revision for Denmark		
Supply chain actor	**General comments** In the response we are only focusing on the part of the Danish forest area which is part of "fredskovspligtigt" (Forest act). This matter was very unclear in the first email and draft sent on the 5th of April. However the matter was clarified in an additional email the 21st of April. In general the whole text has to be checked and rewritten to make sure that these misunderstanding is removed from or clarified in the text. Expanding the scope with a clear definition of the different types covered. I suggest that an analysis is made to clarified the nature of the app. 200.000 ha of forest not covered by the forest act. This work could be done by IGN, KU (authors for the skovstatistik). This would help clarify the scope of the RRA for these areas.	The revised draft RRA Update for Denmark is expanded in scope to include all forests – forests covered by the Forest Act and forests not covered by the Forest Act. Two sub-scopes for the above two categories are created and risk classes are assigned separately for each sub-scope in all indicators. This is now clarified in Sections 2.1 and 2.2 of the RRA Revision. Dr Thomas Nord-Larsen from Forest and Landscape, Copenhagen University is consulted regarding forests covered and not covered by the Forest Act. Several other experts are also consulted. Necessary revision in the text is done throughout the document.
	Also a general update on reference is needed to make sure that it is the most recent reference that is used, to secure a valid and trustworthy argumentation. (ie. Skovstatisk 2021 and not Skovstatistik 2020).	All references are checked and updated when necessary to make sure that the latest available references are used.
	Are we sure that the RRA fully cover all aspect of the REDII requirements (SBP bridging document)?	This RRA Revision for Denmark evaluates all indicators of SBP Standard 1: Feedstock Compliance Standard, Version 2.0 (March 16, 2023). It is up to SBP itself to integrate the relevant aspects of REDII requirements into the indicators mentioned above. In the understanding of the Working Body for RRA Revision for Denmark, the indicators of SBP Standard 1 corresponds to the relevant EU REDII requirements. It can also be noted here that the analyses in relevant indicators (e.g., 1.1.1) are built around EU REDII Articles 29.6-29.7. The text is now revised so that references to these articles become explicit in relevant places.
	Similar it also should be clarified that the woody biomass originating from non-forest area, will also be included in a separate RRA.	Wood biomass originating from non-forest areas (i.e. so-called, trees outside forests) are outside the scope of this RRA Revision. This is now clarified in Section 2.2 Scope and Context of the RRA Revision.
	We find it difficult and unsuitable for an effective and constructive feedback that the report only is available in a pdf version. It is quite difficult to make comments and suggestion for different wording etc. in the format. We suggest that you provide the next version of the RRA in a word version.	An unprotected pdf version was shared where comments can be put easily.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Supply chain actor continued	**Specific comments:** **1.1.1, Analysis: wood pellets and wood chips.** Findings: Implementation of REDII requirements in Denmark (the Handbook) is requirements put on Endusers >2,5 MW. The REDII requirements are only implemented by the BM as a result of requirements from the end users. The majority of BM fulfils the requirements, but not all. I speculate that this indicator based on this should be specified.	The analysis is updated. According to the updated analysis, forests covered by the Forest Act are Low risk, while the forest not covered by the Forest Act are Specified risk. Please see indicator 1.1.1 in Annex 1 for the detailed analysis.
	2.1.1 Analysis: Clarify the different source types, ie. Type 6 should be part of the non-forest RR.	This is now clarified, and the relevant analysis is updated. Please see indicator 2.1.1 in Annex 1 for the detailed analysis.
	3.3.1 Analysis: Updated wording including relevant statistics, important that this stays specified	The relevant analysis is updated with recent statistics. Please see indicator 3.3.1 in Annex 1 for the detailed analysis.
Civil Society Organisation	The scope of the RRA Update should cover forests not covered by the Forest Act as well.	The revised draft RRA Revision for Denmark is now expanded in scope to include all forests – forests covered by the Forest Act and forests not covered by the Forest Act. Two sub-scopes for the above two categories are created and risk classes are assigned separately for each sub-scope in all indicators. This is now clarified in Sections 2.1 and 2.2 of the RRA Revision. Necessary revision in the text is done throughout the document.
	Proposed to use in relevant indicators from Danish FSC FM Standard: Annex B Identification of endangered and rare species*and their habitats* which supports the mapping of endangered*and rare* species in Denmark and Annex G High Conservation Values – Definition, identification and management/monitoring which describes how so-called High Conservation Values*(HCVs) shall be addressed in a Danish context to ensure the identification of their status and operational management.	Definitions are revised for relevant HCV categories accordingly. Please see indicator 2.1.1 in Annex 1 for the detailed analysis.
	Indicator 2.1.1–3 should remain as 'specified risk' as the registration and mapping of private forests under Article 25 of the Forest Act and not all key biotopes are protected.	The relevant analyses in these indicators are updated which also leads to keeping the risk classes specified for these three indicators. Please see indicators 2.1.1-3 in Annex 1 for detailed analyses.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Civil Society Organisation continued	**Indicator 4.1.5:** The whole forest management shall align with the collective agreement, not only the contractor. The collective agreement currently covers wood chip production only, not forest management. There might be the case that in christmas tree plantations foreign workers are employed and paid a lower wage than would be paid to a Dane. In Denmark there is no minimum wage. Please check the analysis.	The analyses now clearly state that collective agreements do not cover forest work. Legislation on contractors' obligations and liability requires that the whole supply chain and all contractors in it align with the applicable laws and agreements. The risk for systematic underpayment and breaching of laws or collective agreements was deemed low in the Danish labour market which has also good enforcement and appeals procedures.
	Clarify that the TOFs are not included in this RRA Revision.	Wood biomass originating from non-forest areas (i.e. so-called, trees outside forests) are outside the scope of this RRA Revision. This is now clarified in Section 2.2 Scope and Context of the RRA Revision.
Regulator	**Indicator 2.2.1:** Should remain low risk. The conversion of bogs and heaths are forbidden in Denmark since 1992.	The relevant analysis in this indicator is updated which also leads to keeping the risk class low. Please see indicator 2.2.1 in Annex 1 for a detailed analysis.
	Indicator 2.2.4: It should be specified risk as there is a high level of residue removal from Danish forests due to increasing market demand. The removal is also driven by good infrastructure (e.g. roads) connecting forests, types of machinery used for harvesting, intensive forest management practices and overall a good history of using residues.	The Danish National Forest Inventory shows that the amount of dead wood within the Danish forests is increasing despite the increased demand for biomass. Thus, the risk class is assessed to be low for all forests.
	Indicators 2.2.9, and 2.2.10: There are no legal requirements in Denmark for the owners or manager of for forests not covered by the Forest Act about how to harvest or regenerate. Should be specified risk for this type of forest.	The relevant analyses in these indicators are updated which also leads to specified risk class for forests not covered by the Act for these two indicators. Please see indicators 2.2.9-10 in Annex 1 for detailed analyses.
	Indicator 3.2.2: It should be 'low risk' as Denmark does not have low-productive sites or areas.	Denmark does have low-productive forest areas that are located for example on nutrient-poor sands with limited water supply. However, as stated in another stakeholder comment, the extent of these areas is small, and many of them are not affected by forestry. Thus, the risk related to this indicator was revised.

Stakeholder	Comment	Response
Trade Association and supply chain actors	**General comments** The RRA is based on several available publications and analysis, which is expected to be based on the newest publications. However, the RRA refers to older publications several times, especially in relation to Danish natural environmental conditions and the Danish legal and legislative basis. Therefore, we strongly encourage the RRA to be reviewed and updated regarding references (publications) to ensure as correct an analysis as possible. Moreover, there are several places in RRA indicating that it is written with insufficient knowledge of the Danish Forest Act and technical terms, which in some places affects the understanding in the RRA. Hence, technical terms are not always used correctly. According to the draft, the scope of the risk analysis covers only areas designated as forest reserves according to the Danish Forest Act. We find this insufficient, and it should be clarified that the RRA covers all forest covered by SBP's definition of forest. However, the analysis of some criteria includes forest and wooded areas that are not designated as forest reserves according to the Forest Act. An email from Indufor by Sepul Barua (sepul.barua@induforgroup.com) on 21st April 2023 clarify that the intention is that the scope of the RRA includes all forest and tree-covered areas as defined by FAO's definition of forest. The email states that these areas will be clearly included in the next draft. However, it is unclear whether this RRA includes trees outside the forest (non-forest). As we understand it, trees outside the forest will be handled in a separate risk assessment on a later stage. Our comment in this answer relates exclusively to the submitted draft RRA.	The revised draft RRA Revision for Denmark is now expanded in scope to include all forests – forests covered by the Forest Act and forests not covered by the Forest Act. Two sub-scopes for the above two categories are created and risk classes are assigned separately for each sub-scope in all indicators. This is now clarified in Sections 2.1 and 2.2 of the RRA Revision. Dr Thomas Nord-Larsen from Forest and Landscape, Copenhagen University is consulted regarding forests covered and not covered by the Forest Act. Several other experts are also consulted. Necessary revision in the text is done throughout the document.
	2.1.1 Key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be identified. In 2022, the registration of the § 25 areas within the Forestry Act in private forest areas was initiated and is expected to finish in 2024 with a publication of the registered areas in 2025. This registration is carried out for both designated forest reserves areas and forest areas not covered by the Forest Act. When this registration is completed, it will contribute significantly to the fulfillment of the criterion – also for the sourcing areas, which now are identified as specified risk.	The analysis of this indicator is revised accordingly. Please see Indicator 2.1.1 in Annex 1.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association and supply chain actors continued	Specified risk has been identified for the following sources: Feedstock from harvesting in even-aged stands of conifers: There is a low risk in thinning operations in even-aged conifer stands, whereas a specified risk has been identified in "old growth even-aged coniferous stands" based on expert assessment. This specified risk is new compared to the latest RRA. It is not clear how "old growth even-aged coniferous stands" is defined, or who has provided the expert assessment. It is unclear whether the criterion applies to all species of conifers (including the non-native species), as well as whether it only applies for even-aged coniferous stands exceeding normal rotation age. We do not find evidence of coniferous stands that are felled or re-planted at normal rotation age contain ecological natural values falling within the definition of HCV, particularly for non-native coniferous species. We suggest the risk is specified as follows: "Regarding old growth (more than 90 years) even-aged coniferous stands of native species (Pinus sylvestris and Picea abies) – based on expert consultation – the risk can be assessed as specified." Feedstock from uneven-aged stands or stands of broadleaf species: This type of stand is regarded as a specified risk, due to no legal requirements for identification or mapping key biotopes. We support keeping awareness and attention to these areas as long the § 25 registration is not completed.	
	2.1.2 Threats to and impacts on the identified key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be identified and evaluated. Likewise in 2.1.1., the sourcing areas are differentiated and addressed, which makes good sense. However, just as in 2.1.1, we miss a clarification of "old growth even-aged coniferous stands", and a reference to the expert assessment and on what basis the expert assessment was made.	The analysis of this indicator is revised accordingly. Please see Indicator 2.1.2 in Annex 1.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association and supply chain actors continued	Regarding the specified risk for feedstock from uneven-aged stands or stands of broadleaf species, the registration of § 25 areas will also provide information of threats. As long as the mapping-exercise is not completed, we support this as a specified risk. We also note that HCV areas must be evaluated instead of addressed (as written in the existing RRA). It should be clarified what "evaluating" means instead of "addressing", as this will impact the measurements fulfilling this criterion.	
	2.1.3 (new criterion) Key species, habitats, ecosystems, and areas of high conservation value (HCV) pertaining to biodiversity in the Supply Base shall be maintained or enhanced. The criterion is interlinked with 2.1.1 and 2.1.2. Due to unmapped/unidentified HCV areas, and hence unassessed threats, it is hard to maintain or enhance these areas. Likewise in 2.1.1 and 2.1.2, it should be clarified that it only applies for sourcing areas with a specified risk as in 2.1.1 and 2.1.2. When the registration of §25-areas has finished, maintaining the areas become easier. If the areas should be improved, there is a need for a clear target for the management of the areas.	The analysis of this indicator is revised accordingly. Please see Indicator 2.1.3 in Annex 1.
	2.2.2 (new criterion) Ecosystems, their health, vitality, functions and services in the Supply Base shall be maintained or enhanced. Requirement is met for areas covered by the Forest Act, for designated Natura 2000-areas and individual protected areas (Nature Protection Law § 3), but due to a lack of comprehensive registration of the § 25 areas, key biotopes are not systematically identified and mapped. Key ecosystems and habitats are thus protected (Natura 2000) and / or preserved (mapped) in their natural state. The biomass producer must implement a procedure that ensures that the mapped areas are maintained or improved. The RRA refers to the report from Johansen et. al., which emphasise the need for management targets and fundings to improve biodiversity, including the need for identifying the habitats and comprehensive knowledge of usable management tools. We support this approach.	The analysis of this indicator is revised accordingly. Please see Indicator 2.1.3 in Annex 1.

Stakeholder	Comment	Response
Trade Association and supply chain actors continued	The ongoing registration of the §25-areas will contribute with the needed mapping and knowledge of ecosystems and habitat outside Natura2000-areas, whereby targets to enhance biodiversity can be increased. Moreover, test of different management measures is carried out. "Expert consultation suggests that increased demand for biomass feedstock will provide a new incentive for forest managers to remove additional woody biomass from forests, giving rise to a risk that biodiversity will not be sufficiently protected. Especially dead and decaying trees and deadwood on the forest floor have an important role in maintaining biodiversity in Danish forests." There is no reference for this statement. We would like to emphasise the need for a concrete reference to the expert used. Moreover, the Danish National Forest Inventory shows that the amount of dead wood within the Danish forests is increasing despite increased demand for biomass. A report from the JRC "Biomass production, supply, uses and flows in the European Union" also conclude, that declining carbon uptake in European forests is due to the age distribution of forest, an increasing impact of natural disturbances as forest fires and other climatic drivers. Hence, the demand for biomass is not the main driver. (Link: https://publications.jrc.ec.europa.eu/repository/handle/JRC132358).	
	3.2.2 (new criterion) Primary feedstock shall not be sourced from forest areas where site productivity is low and, according to local definitions or norms, the areas are classified as low-productive or difficult to regenerate. We do not think this analysis really assess whether low-productive and low-regenerating areas, which will be affected by normal forestry and removal of wood biomass, exist in Denmark. In Denmark, we have quite equal precipitation throughout the country and relatively large deposition of nitrogen due to livestock production. Hence, there are very few areas which can be described as low-productive. There are a few coastal forests where production is low, and woody biomass from low-nutrient wetland on heathlands and moors are mostly cleared as part of nature conservation to keep the landscape open. In general, there are good growth conditions in Denmark due to climatic conditions, soil conditions and a large supply of nutrients from other sources.	Denmark does have low-productive forest areas that are located for example on nutrient-poor sands with limited water supply. However, as stated in the comment, the extent of these areas is small, and many of them are not affected by forestry. Thus, the risk related to this indicator was revised.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association and supply chain actors continued	Therefore, we do not find it relevant to assess this criterion as a specified risk in Denmark and states that it should be changed to low risk.	
	3.2.3 (new criterion) Primary feedstock shall not be sourced from forest areas in the Supply Base which, according to local definitions or norms, are classified as having combined attributes of high carbon stocks and high conservation value (HCV). Likewise in 3.2.2 we do not think the analysis really consider the natural and climatic basis in Denmark. The first section of the analysis says: "The EU (e.g., REDII) considers high carbon stocks to be in wetlands, peatlands and forests (EU REDII, EU Glossary Item: "Land with high carbon stock"). In the context of forest ecosystems, mature and old-growth forests have the highest carbon stocks, and old-growth forests are also important for biodiversity (e.g., Molina-Valero et al., 2021, Ķēniņa et al., 2019, Nord-Larsen et al., 2019, Seedre et al., 2015, Luyssaert et al., 2008)." Regarding the EU definition of old-growth forests, it is very unclear if forests, defined as old-growth forests, even exist in Denmark. In some cases, biomass may be sourced from protected moors, meadows, and other wetlands. However, this sourcing is mostly part of the nature conservation for keeping the landscape open. This is not addressed in the RRA. We do not find the above leads to a specified risk. Hence, it should be changed to a low risk. Moreover, the analysis refers to an old voluntary agreement "Danish Industry Agreement for Sustainable Biomass". The voluntary agreement is no longer applicable, as it has been replaced by the legal requirements in Biomassehåndbogen.	The reference to the old voluntary agreement "Danish Industry Agreement for Sustainable Biomass" was replaced by a current one. The specified risk in this indicator is because there most likely exist unmapped key biotopes in Danish forests. The possibility that the key biotopes are located in areas with high carbon stocks such as mature (secondary) forests cannot be ruled out. The indicator was reviewed but the risk classification remains unchanged.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association and supply chain actors continued	*3.3.1 (new criterion) Feedstock sourcing shall be in compliance with the principles of cascading use, high quality stem wood shall not be used as feedstock if it is in substantial demand for long lived products in the Supply Base.* This is a new criterion. We do not think the analysis fully reflects the requirements regarding the cascading use of wood. The reference to the Danish NFI, which shows the share of timber and energy biomass (wood chips), does not give evidence for saying, that there is a risk of "high-quality stem wood" ending up as wood chips. The statistics shows the total amount biomass felled, including biomass from thinning, nature conservation, infrastructure project and more. Much of this biomass is low quality, only suitable for energy purpose anyway. In general, we believe that the market regulates a cascading use. The figure below shows both the historical and current price difference between timber and energy biomass. The difference in prices ensures optimisation in line with the cascade principle. This should be included in the analysis. In the past year, due to the war in Ukraine and the energy crisis, there have been disturbances in the market, which means higher demands for biomass for energy purpose. Nevertheless, the figure above shows that the price for high-quality stem wood has been increasing parallel with wood chips. Hence, the market ensures compliance to cascading use even in "disturbing times". Compliance with the cascade use should always be an operational assessment.	The provided price information is included in the analysis. The lack of legislative regulation and enforcement of the cascade principle, the information provided by the local expert, and the lack of data related to the quality of wood used for energy purposes are the main contributors to the initial risk classification of this indicator. The indicator is reviewed in light of the provided information.
	4.1.8 (new criterion) Training shall be provided for all workers to allow them to implement the conditions set out in all elements of the SBP standards relevant to their responsibilities. We agree that the requirement should be individual and that the entrepreneurs are responsible for the compliance with the criteria. It is up to the individual certificate owner to design the requirements, as each entrepreneur is different. This helps to ensure flexibility. Hence, we agree with the criterion as a specified risk.	Biomass producers shall take risk mitigation measures relevant to the specific supply chain to ensure that workers in the supply chain have adequate competence in sustainable management practices that conform to the SBP requirements.
Certification Body	Preliminary feedback: There may be risk of conversion (indicator 2.2.1) of the 30% of the forests which are not covered by the Forest Act.	The relevant analysis in this indicator is updated which leads to keeping the risk class low for all forests in Denmark. Please see indicator 2.2.1 in Annex 1 for a detailed analysis.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Certification Body continued	**Original in Danish** Lidt ting der sprang i øjnene. Fx er det ikke Naturstyrelsen man skal søge tilladelse til for at drive sin skov i Natura2000 områder (det er Miljøstyrelsen). Og det passer ikke at der undtagelsen frem for reglen at man får lov til at fortage det hugstindgreb man ønsker, hvis man har sin skov i Natura2000. Og så nævner I specifikt Danmark egetforbrug og produktion af træpiller uden at komme ind på flis – mht egenproduktion af biomasseproducenter er det jo flisen og ikke træpiller der er interessant – så en sjov prioritet/udeladelse Og så er der nogel procenter der ikke giver 100 'About 67% of the Danish forest area is covered with even-aged planted stands with 7% being even-aged stands from natural regeneration (Skovstatistik 2020). Around 15% of the forest area is covered by uneven-aged stands, of which 5% is natural forest (Skovstatistik 2020).' = 82% **Microsoft Outlook translation:** Little things that stood out. For example, it is not the Danish Nature Agency that you need to apply for a permit to manage your forest in Natura 2000 areas (it is the Danish Environmental Protection Agency). And it is not true that there is an exception rather than the rule that you are allowed to carry out the harvesting intervention you want if you have your forest in Natura 2000. And then you specifically mention Denmark's self-consumption and production of wood pellets without mentioning wood chips – in terms of own production of biomass producers, it is the tile and not wood pellets that is interesting – so a funny priority/omission. And then there are some percentages that do not give 100: 'About 67% of the Danish forest area is covered with even-aged planted stands with 7% being even-aged stands from natural regeneration (Skovstatistik 2020). Around 15% of the forest area is covered by uneven-aged stands, of which 5% is natural forest (Skovstatistik 2020).' = 82%	The text is revised accordingly in relevant places.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Civil Society Organisation	If biomass is removed from forests (in Denmark or abroad) for incineration it results in global warming, air pollution and loss of biodiversity. Hence, incineration is the opposite of green transition. Green transition is all about stop burning the resources. We must stop burning both fossil fuels and biomass to focus on clean energy from sun, wind, hydro and heat pumps as soon as possible – combined with better insulation, energy efficiency, local and central heat and electricity storages etc.	'Order on Handbook on the fulfilment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes' (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål) that the Danish Energy Agency introduced to implement EU REDII recognises that biomass contributes to reducing emissions when it comes from forestry residues. There is a robust body of scientific literature documenting the climate benefits of bioenergy. See, for example, Intergovernmental Panel on Climate Change [IPCC]. 2012. Renewable Energy Sources and Climate Change Mitigation. Cambridge University Press.
Trade Association	**The original comment:** [..] takker for muligheden for at kommentere på SBP's regionale risikovurdering for Danmark. SBP er etableret for at sikre, at træbaseret biomasse stammer fra fra lovlige og bæredygtige kilder. Det er et forhold, som vi i [..] kun kan bakke op om. SBP er da også en udbre dt ordning blandt vores medlemmer, der forsyner energisektoren med restprodukter fra forarbejdning af gavntræ til et væld af forskellige træprodukter. Hvor SBP er glimrende til at garantere lovlig og bæredygtig oprindelse, mener vi imidlertid, at der er en mangel, hvad angår, at den begrænsede skovressource også sikres en bæredygtig anvendelse – hvilket ikke er en selvfølge, selvom selve skovdriften kan siges at være lovlig og bæredygtig. VE direktivet og den danske lovgivning sætter laveste fællesnævner for kravet til bæredygtig biomasse og dokumentationen herfor. For en certificeringsordning er det en vigtig opgave, at hæve niveauet og sætte en retning, der i højere grad understøtter en bæredygtig udvikling, end lovgivningen umiddelbart kan opnå. Vi mener derfor, at det er vigtigt, at SBP tager de nødvendige skridt, og stiller konkrete krav til sikring af ikke blot lovlig og bæredygtig oprindelse men også, at udnyttelse af ressourcen er bæredygtig.	See the answer to the comment on the row below.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association continued	Træ og skoves potentiale for at modvirke klimaforandringer afhænger af flere forhold. Udover lovlig og bæredygtig oprindelse skal ressourcen naturligvis udnyttes optimalt. Det indebærer, at biomassen så vidt muligt udnyttes til fremstilling af produkter først og siden til energiudnyttelse. Kun hvor der ikke er mulighed for produktiv anvendelse, kan det, i en ressource- og klimamæssig sammenhæng, retfærdiggøres, at energiudnytte biomassen som første anvendelse. Dette bør SBP medvirke til at sikre opfyldelsen af og vi kan kun bakke op om, at SBP inddrager problematikken i den opdaterede risikovurdering for Danmark ved at introducere Element 3.3.1 og herunder princippet om kaskadebrug. Det er særligt relevant i det lys, at gavntræ aktuelt finder direkte anvendelse til energiproduktion pga. øget efterspørgsel på energitræ efter udelukkelsen af russisk gas på det europæiske energimarked. Vi er således også enige i, at der er tale om en specificeret risiko. Vi mener ikke, at VE-direktivet og herunder dansk lovgivning, i tilstrækkelig grad tager højde problematikken om, at gavntræ anvendes til energiproduktion. Direktivets og lovens henvisning til kaskadeprincippet sender det rigtige signal, men muligheden for fravigelse af kravet er for stort. Dette gør, at kravet reelt er uden effekt. Det bør SBP certificering tage højde for, med skærpede dokumentationskravet ift. det gældende lovkrav. Under SBP opfordrer vi derfor til, at kravet om kaskadeprincip ikke må fraviges uden behørig rapportering af hvorfor stammetræ over 20 cm, eller hvis mere end 50 % af biomassen fra et forsyningsområde, anvendes til energiformål. Vi er uenige i vurderingen fra lokale eksperter, som det fremgår af analysen, at kvaliteten af træ til energi ikke behøver at blive rapporteret. Vi opfordrer således til, at der indføres krav om, at mængde, kvalitet og manglende efterspørgsel til produktiv anvendelse, dokumenteres behørigt, såfremt gavntræ anvendes til energiproduktion. Dette vil bringe fokus på, at der så vidt muligt skal søges aftagere til produktiv anvendelse. Samtidig vil dokumentationen skabe et nødvendigt overblik over omfanget af energiproduktion ved af anvendelsen af gavntræ, som i dag ikke er eksisterende. Se kommentar vedr. element 3.3.1 nedenfor.	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association continued	**Auto-translation (DeepL):** Thank you for the opportunity to comment on the SBP regional risk assessment for Denmark. The SBP has been established to ensure that wood-based biomass originates from legal and sustainable sources. This is something that we can only support. Indeed, the SBP is a widespread scheme among our members, supplying the energy sector with residues from the processing of timber into a wide variety of wood products. However, while the SBP is excellent at guaranteeing legal and sustainable sourcing, we believe there is a gap in terms of ensuring that the limited forest resource is also put to sustainable use – which is not a given, even if the forestry itself can be said to be legal and sustainable. The Renewable Energy Directive and Danish legislation set the lowest common denominator for the requirement for sustainable biomass and the documentation thereof. For a certification scheme, it is an important task to raise the level and set a direction that supports sustainable development to a greater extent than the legislation can immediately achieve. We therefore believe that it is important that SBP takes the necessary steps and sets concrete requirements to ensure not only legal and sustainable origin but also that the utilisation of the resource is sustainable. The potential of wood and forests to mitigate climate change depends on several factors. In addition to legal and sustainable origin, the resource must of course be optimally utilised. This means that, as far as possible, biomass should be used first for the production of products and then for energy utilisation. Only where there is no possibility of productive use can it be justified, in a resource and climate context, to utilise the biomass for energy as the first use.	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association continued	SBP should contribute to ensuring the fulfilment of this and we can only support SBP's inclusion of the issue in the updated risk assessment for Denmark by introducing Element 3.3.1 and including the principle of cascading use. This is particularly relevant in light of the fact that timber is currently used directly for energy production due to increased demand for energy wood following the exclusion of Russian gas from the European energy market. Thus, we also agree that this is a specified risk. We do not believe that the Renewable Energy Directive, including Danish legislation, takes sufficient account of the problem of using timber for energy production. The reference to the cascade principle in the Directive and the Act sends the right signal, but the possibility of deviating from the requirement is too great. This means that the requirement is effectively ineffective. SBP certification should take this into account, with stricter documentation requirements compared to the current legal requirement. Under SBP, we therefore call for the cascade principle requirement not to be waived without proper reporting of why stem wood over 20 cm, or if more than 50% of the biomass from a supply area is used for energy purposes. We disagree with the judgement of local experts, as stated in the analysis, that the quality of wood for energy does not need to be reported. We therefore call for the introduction of a requirement that the quantity, quality and lack of demand for productive use be duly documented if timber is used for energy production. This will emphasise that, as far as possible, buyers for productive use should be sought. At the same time, the documentation will create a necessary overview of the extent of energy production from the use of timber, which does not currently exist. See comment on element 3.3.1 below.	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association continued	The original comment in Danish (the text snippet that the comment is about is added below): "...However, the requirement is one of three ways in which the "additional climate requirement" (forest carbon stock must not decrease in the short or medium term either in the country of origin or in the source area) can be fulfilled. If one of the two other ways is applied, there is no need to fulfil the 20 cm diameter/max. 50% of forest biomass to energy requirement. Moreover, according to the local expert consultation, there is no requirement to report the quality of wood used for energy production. There are also situations where wood that could be used as timber is rather used in energy production..." Kommentaren vedrører især tekstafsnittet markeret med fed: Vi er enige i, at der kan være situationer, hvor det ikke kan betale sig at udnytte gavntræ produktivt. Fx hvis mængden er begrænset eller hvis der ikke er aftagere til produktiv anvendelse. Afbrænding af gavntræ bør selvsagt reduceres til et minimum. Sker det alligevel bør det ikke ske uden, at mængde, kvalitet og manglende efterspørgsel til produktiv anvendelse, er dokumenteret behørigt. Vi er således uenige i, at der ikke er behov for at rapportere kvalitet af træ anvendt til energiproduktion. **Auto-translation (DeepL):** The comment relates in particular to the section of text highlighted in bold: We agree that there may be situations where it is not worthwhile to utilise timber productively. For example, if the quantity is limited or if there are no buyers for productive use. The burning of timber should of course be reduced to a minimum. However, if it does happen, it should not be done without proper documentation of the quantity, quality and lack of demand for productive use. We therefore disagree that there is no need to report the quality of wood used for energy production.	The wording "...there is no need to fulfil the 20 cm diameter/max. 50% of forest biomass to energy requirement" refers to the current situation and the regulation in question: currently, only one of the extra climate requirement options is required to be fulfilled by the Danish Energy Agency's "handbook". Moreover, there are currently no legal or regulatory requirements in place demanding that the quality of wood used for energy purposes must be reported. The highlighted section was revised and clarified.

Stakeholder	Comment	Response
On Revised Draft RRA revision for Denmark		
Supply chain actor	*Chapter 2.2:* This chapter lacks a description of the production of wood chips, it only describes around wood pellets, which is not relevant for this RRA. Please update the text	Text revised accordingly.
	Indicator 3.3.1 When you decided to make the indicator low risk, I suggest to make sure that a least the analysis behind is relevant. The text shown beneath (in bold) is irrelevant in practice and never used. I suggest to delete. On the other hand, Danish Energy Agency's "handbook" which was first introduced in 2021 and amended in October 2022, includes an "additional climate requirement" in section 5.6; there are three options for fulfilling the requirement (Danish Energy Agency 2022a). One of the options is the following: "Only residues are used The additional climate requirement for forest biomass can be met by documenting that only waste and residual products from forestry are used. Specifically, one of the following two requirements must be met: a. No wood over 20 cm in diameter is used b. Less than 50% of the forest biomass sold from the source area is allocated directly for energy purposes." However, as stated before, the residue requirement is one of three options in which the "additional climate requirement" (forest carbon stock must not decrease in the short or medium term either in the country of origin or in the source area) can be fulfilled. If one of the other ways is applied, the Handbook does not require fulfilling the 20 cm diameter/max. 50% of forest biomass to energy requirement.	Indicator 3.3.1 is revised accordingly.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association and supply chain actors	**General comments** Firstly, we welcome the general update on references, background and Danish legal and legislative basis used throughout the analysis. We also find the scope clear as a comprehensive analysis for both forest covered and not covered by the Danish Forest Act. Regarding the division between forest covered and not covered by the Danish Forest Act, we support that approach, as the legal basis is quite different. Therefore, we also support the greater awareness for biomass from forest not covered by the Forest Act. **Specific comments on individual sections** In the following, we will comment particularly on the criteria that have been assessed as specified risk. We also comment on sections with incomplete information or incorrect interpretations.	Thank you very much for your positive and constructive feedback.
	1.1.1 Operations related to feedstock sourcing and biomass production shall comply with all existing applicable laws and regulations. A specified risk for forests not covered by Danish Forest Act has been identified. Overall, we acknowledge that, as there are no legal requirements in Denmark for the owners or manager of for forests not covered by the Forest Act about how to harvest or regenerate. Moreover, the implementation of the Handbook is a requirement put on bioenergy producers of capacity above 2.5 MW in Denmark. This means only the defined bioenergy producers are required to comply with all requirements of the Handbook set to implement REDII in Denmark when sourcing biomass from forests. Despite limited amount of biomass for bioenergy producers of capacity below 2.5 MW, we support the identified specified risk for forests not covered by the Forest Act.	
	2.1.1, 2.1.2 and 2.1.3 We thank you for including our specific comments and considerations in these sections. We support the identified specified risk.	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association and supply chain actors continued	*2.2.2* We thank you for including our specific comments and considerations in these sections. We support the identified specified risk for forest not covered by the Forest Act until mapping and registration of § 25 areas have completed.	
	2.2.9 Harvesting levels shall be justified as to how they can be sustained with reference to inventory and growth data for the Supply Base The Forest Act ensures that forest covered by the Forest Act are sustained. The RRA acknowledges that due to age class distribution in the individual forests, there can be management plan periods where the harvest levels exceed the increase in standing volume. However, these harvest levels are justified using inventory and growth data and do not threaten forest productivity or long-term economic viability. We support this approach.	
	2.2.10 Harvested areas shall be regenerated. For the forests not covered by the Forest Act, compliance to the regeneration requirement must be documented according to Section 5.3.1 of the Handbook. However, it should be noted here that the jurisdiction of the Handbook only covers bioenergy producers of capacity above 2.5 MW. There are no legal requirements in Denmark for the owners or manager of forests not covered by the Forest Act to regenerate the forest. Hence, we support the identified specified risk for forest not covered by the Forest Act.	
	3.2.2 We thank you for including our specific comments and considerations in this section. We support the change to low risk.	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association and supply chain actors continued	*3.2.3 Primary feedstock shall not be sourced from forest areas in the Supply Base which, according to local definitions or norms, are classified as having combined attributes of high carbon stocks and high conservation value (HCV).* We still don't find a comprehensive justification of where areas with combined attributes of high carbon stocks and HCV are found. The section primarily refers to areas with HCV, which is also outlined in 3.2.2, but a justification with the combined criteria of high carbon stock and HVC still lacks. In addition, there is no definition of "high carbon stock". The listed habitat types defined by EU does not necessarily refer to forest with high carbon stock. Moreover, the RRA outline that 6 % of the total forest area has been identified as more than 100 years old, and 1 % more than 150 years old. It is not clear whether these forests are considered as old-growth forest or in a natural of semi-natural state. The regeneration time for beech forest is on average 110 years and for oak forest it is 130 years in Denmark. Hence, forest more than 100 and 150 years old does not necessarily classify them as old-growth forest. Regarding sizes of key biotopes: "However, it was brought up in the stakeholder consultation that only the larger ecosystems and forest types are mapped, and smaller key biotopes are still not covered.", we don't find a clear definition of what is regarded as a small or large ecosystem. The ongoing registration of § 25 areas is set to a minimum area of 0.5 ha, which we find appropriate. Ultimately, we don't find the criteria and analysis operational, as it is not clear how to identify the areas. Moreover, we want to emphasise that there is a significant difference between being aware of and considering HCV areas, and not allow sourcing from these areas at all.	In indicator 3.2.3, old-growth and mature forests (as well as wetland and peatland forests) are considered to be areas with high carbon stock regardless of the degree of naturalness. The forest areas of over 100 and 150 years of age are not necessarily old-growth forests or in a natural or semi-natural state, but there is a high probability that they hold high carbon stocks as well. As stated in the analysis, we cannot rule out the possibility that these areas entail HCV attributes and thus, the risk class remains specified.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association and supply chain actors continued	*3.3.1* We thank you for including our specific comments and considerations in this section. Regarding the wording "additional climate requirement" it should be emphasised and clarified that the requirements are limited to biomass sourced from forest not covered by the Paris Act or has a decreasing carbon stock. The current wording gives the impression that there is requirement for either diameter or amount sold for energy purpose, applies to all biomasses. In addition, it is stated in the Danish NFI, that based on the last two five-year rotations of measurements, the amount of biomass in the forests has increased by 2.1 million m3/year, equivalent to 2.2 million tons CO_2e annually (https://static-curis.ku.dk/portal/files/338858104/Rapport_Skovstatistik_2021_web.pdf P. 26). Potentially, it could be included in the analysis.	Indicator 3.3.1 was revised and the section referring to the additional climate requirement was deleted as it was deemed to not be elemental to the analysis.
Trade Association	**Sustainable Biomass Program (SBP)** Update of Regional Risk Assessment for Denmark **[••]** [••] takker for muligheden for at kommentere på SBP's reviderede risikovurdering for Danmark. [••] kan ikke bakke op om den opdaterede analyse og risikovurdering under 3.3.1, som nu anføres som "low risk". Vi mener at risikovurderingen fortsat skal være "specified risk". Vi mener, at den tilføjede prisstatistik, hvor afregningsprisen for skovflis i længere perioder overstiger prisen på cellulose, understreger risikoen for, at gavntræ i lavere kvaliteter, typisk anvendt til spånplader, gulvtræ, emballage og cellulose, anvendes direkte til energiproduktion. Produktiv anvendelse bør altid prioriteres før afbrænding. Her kan tilføjes, at brændværdien er intakt, når produkterne har været anvendt i en kortere eller længere brugsperiode, hvorfor potentialet for energiudnyttelse ikke reduceres, når produkterne er udtjente. Blot har træet gjort en betydelig klimagavn i mellemtiden. Dette bør SBP understøtte.	Indicator 3.3.1 was reviewed. The indicator's risk class remains as low since there is not enough evidence to justify the specified risk. The indicator in question is difficult to assess as the quality of wood used for energy purposes is not recorded in Denmark. Despite a low-risk classification, we highlighted the need to pay special attention to the development of wood prices and market situation in the future due to the recent market disturbances – even though the prices of timber and pulpwood have remained above the price of biomass in 2022 and 2023 according to the price data presented in the analysis.

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association continued	Vi mener, at analysen modsiger sig selv, når det på en gang understreges, at der er behov for at følge prisudviklingen tæt, fordi markedet "måske" ikke alene er i stand til at sikre kaskadeprincippet, men alligevel tildeler elementet "lav risiko". Denne karakteristik bør som minimum fastholde vurderingen "specified risk". Vi mener herunder ikke, at henvisning til manglende reguleringsmæssige krav er et gyldigt argument for ikke at kræve yderligere dokumentation. SBP ordningen er sat i verden for at hæve niveauet over de gældende lovkrav og for at sikre et til stadighed højt niveau af bæredygtighed. **Risikovurdering** Som en del af den eksisterende screening opfordres til, at der udføres en obligatorisk risikovurdering af kaskadeprincippet. Herunder bør det beskrives på leverandør-/skovejer-/kontrakt-niveau, hvad risikoen er for brud på kaskadeprincippet og hvordan risikoen håndteres. Risikovurdering kan fx ske på baggrund af rapportering af følgende oplysninger: – Oprindelse (GPS lokalitet), – Træart, – Bevokningsalder og – Effektaflæggelse (stammetræ/flis/grot m.fl.) På baggrund heraf vurderes, om aflæggelsen af gavntræ og biomasse følger kaskadeprincippet. Såfremt data viser, at der indgår høj andel af stammetræ i biomassen, redegøres der herfor i risikovurderingen. Dataindsamlingen vil samtidig sikre, at grundlaget for vurderingen forbedres over tid. Kaskadeprincippet kan opfølgende kontrolleres stikprøvevis ved besøg på skovningsarealet med registrering af stød (antal/diameter mv), som sættes i forhold til den rapporterede træart, bevokningsalder og effektaflæggelse.	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association continued	**Udvikling af analysemetode** Der opfordres desuden til at udvikle en analysemetode, der på rutinebasis, fx som led i varmeværkernes indvejning og kontrol af fugtindhold mfl., kan vise biomassens bark/ved ratio. Analysen kan bruges som indikator på, om biomassen i sit udgangspunkt havde potentiale for produktiv anvendelse, idet lavt barkindhold vil indikere anvendelse af stammetræ i større dimensioner, som kunne være anvendt produktivt. Danske Træindustrier og Træ- og Møbelindustrien er åbne for forslag der kan sikre kaskadeprincippet og bidrager naturligvis gerne til uddybning af ovenstående. **Translation (DeepL):** **Sustainable Biomass Program (SBP)** **Update of Regional Risk Assessment for Denmark** Thank you for the opportunity to comment on the SBP's revised risk assessment for Denmark. We cannot support the updated analysis and risk assessment under 3.3.1, which is now listed as "low risk". We believe that the risk assessment should remain "specified risk". We believe that the added price statistics, where the settlement price for wood chips exceeds the price of cellulose for longer periods of time, emphasises the risk that beneficial wood in lower qualities, typically used for chipboard, flooring, packaging and cellulose, is used directly for energy production. Productive use should always be prioritised before burning. It should be added that the calorific value is intact when the products have been used for a shorter or longer period of time, so the potential for energy recovery is not reduced when the products have reached the end of their useful life. However, the wood has made a significant climate benefit in the meantime. SBP should support this.	

Stakeholder	Comment	Response
Trade Association continued	We believe that the analysis contradicts itself when it simultaneously emphasises the need to closely monitor price developments because the market "may" not only be able to ensure the cascade principle, but also assigns the element "low risk". This characteristic should at least retain the "specified risk" rating. In this context, we do not believe that reference to lack of regulatory requirements is a valid argument for not requiring additional documentation. The SBP scheme is designed to raise the bar above the current regulatory requirements and to ensure a consistently high level of sustainability. **Risk assessment** As part of the existing screening, it is encouraged that a mandatory risk assessment of the cascade principle is carried out. This should include a description at supplier/forest owner/contract level of the risk of breaching the cascade principle and how the risk is managed. Risk assessment can, for example, be based on reporting the following information: – Origin (GPS location), – Tree species, – Stand age, and – Effect deposition (stem wood/chips/grotto etc.). Based on this, it is assessed whether the delivery of timber and biomass follows the cascade principle. If data shows that there is a high proportion of stem wood in the biomass, this is explained in the risk assessment. The data collection will also ensure that the basis for the assessment improves over time. The cascade principle can be followed up with random checks by visiting the harvesting area and recording the number of impacts (number/diameter, etc.) in relation to the reported tree species, stand age and power generation.	

Annex 5 Stakeholder consultation report continued

Stakeholder	Comment	Response
Trade Association continued	**Development of an analysis method** It is also encouraged to develop an analysis method that can show the biomass's bark/wood ratio on a routine basis, e.g., as part of the heating plants' weighing and control of moisture content, etc. The analysis can be used as an indicator of whether the biomass initially had potential for productive use, as low bark content will indicate the use of stem wood in larger dimensions that could have been used productively. Danske Træindustrier and Træ- og Møbelindustrien are open to suggestions that can ensure the cascade principle and are of course happy to contribute to the elaboration of the above.	

Annex 6 REDII Level A risk assessment – Denmark

Sustainable harvesting criteria 29(6)

The country in which forest biomass was harvested has national or sub-national laws applicable in the area of harvest as well as monitoring and enforcement systems in place ensuring:

(i) The legality of harvesting operations

Step 1: Identification of applicable laws

Have the applicable law(s) been identified?	✓ Yes ☐ No, Level B route is required
List of applicable law(s)	– Danish Forest Act – Danish Nature Protection Act – Sustainability Handbook (officially, Order on Handbook on the fulfillment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål))
Sources	– Danish Forest Act: https://www.retsinformation.dk/eli/lta/2019/315 – Danish Nature Protection Act: https://www.retsinformation.dk/eli/lta/2013/951 – Sustainability Handbook: https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf

Step 2: Description of enforcement and monitoring

Description of the practical implementation of the law(s)	The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the Forest Act and Nature Protection Act. The Danish Energy Agency under the Ministry of Climate, Energy and Utilities enforces the Sustainability Handbook
Sources	Webpages of and consultation with the official from the relevant agencies
Is the enforcement and monitoring ensured for the identified law(s)?	✓ Yes ☐ No, Level B route is required

Step 3: Evaluation of the effectiveness of the legal framework on the legality of timber harvesting

Evaluation of the practical implementation of the law(s) and explanation for the evaluation	Regular monitoring of the enforcement is conducted and reported by the concerned agencies
Sources	Webpages of and consultation with the official from the relevant agencies
Is legal framework effective?	✓ Yes ☐ No, Level B route is required

Annex 6 REDII Level A risk assessment – Denmark continued

(ii) Forest regeneration of harvested areas

Step 1: Identification of applicable laws

Have the applicable law(s) been identified?	✓ Yes ☐ No, Level B route is required
List of applicable law(s)	– Danish Forest Act – Sustainability Handbook (officially, Order on Handbook on the fulfillment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål))
Sources	– Danish Forest Act: https://www.retsinformation.dk/eli/lta/2019/315 – Sustainability Handbook: https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf

Step 2: Description of enforcement and monitoring

Description of the practical implementation of the law(s)	The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the Forest Act. The Danish Energy Agency under the Ministry of Climate, Energy and Utilities enforces the Sustainability Handbook.
Sources	Webpages of and consultation with the official from the relevant agencies
Is the enforcement and monitoring ensured for the identified law(s)?	✓ Yes ☐ No, Level B route is required

Step 3: Evaluation of the effectiveness of the legal framework on the legality of timber harvesting

Evaluation of the practical implementation of the law(s) and explanation for the evaluation	Regular monitoring of the enforcement is conducted and reported by the concerned agencies
Sources	Webpages of and consultation with the official from the relevant agencies
Is legal framework effective?	✓ Yes ☐ No, Level B route is required

Annex 6 REDII Level A risk assessment – Denmark continued

(iii) That areas designated by international or national law or by the relevant competent authority for nature protection purposes, including in wetlands and peatlands, are protected unless evidence is provided that the harvesting of that raw material does not interfere with those nature protection purposes

Step 1: Identification of applicable laws	
Have the applicable law(s) been identified?	✓ Yes ☐ No, Level B route is required
List of applicable law(s)	– Danish Forest Act – Danish Nature Protection Act – Sustainability Handbook (officially, Order on Handbook on the fulfillment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål))
Sources	– Danish Forest Act: https://www.retsinformation.dk/eli/lta/2019/315 – Danish Nature Protection Act: https://www.retsinformation.dk/eli/lta/2013/951 – Sustainability Handbook: https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf
Step 2: Description of enforcement and monitoring	
Description of the practical implementation of the law(s)	The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the Forest Act. The Danish Energy Agency under the Ministry of Climate, Energy and Utilities enforces the Sustainability Handbook.
Sources	Webpages of and consultation with the official from the relevant agencies
Is the enforcement and monitoring ensured for the identified law(s)?	✓ Yes ☐ No, Level B route is required
Step 3: Evaluation of the effectiveness of the legal framework on the legality of timber harvesting	
Evaluation of the practical implementation of the law(s) and explanation for the evaluation	Regular monitoring of the enforcement is conducted and reported by the concerned agencies
Sources	Webpages of and consultation with the official from the relevant agencies
Is legal framework effective?	✓ Yes ☐ No, Level B route is required

Annex 6 REDII Level A risk assessment – Denmark continued

(iv) That harvesting is carried out considering the maintenance of soil quality and biodiversity with the aim of minimising negative impacts

Step 1: Identification of applicable laws

Have the applicable law(s) been identified?	✓ Yes ☐ No, Level B route is required
List of applicable law(s)	– Danish Forest Act – Danish Nature Protection Act – Sustainability Handbook (officially, Order on Handbook on the fulfillment of sustainability requirements and requirements for saving greenhouse gas emissions for biomass fuels for energy purposes (Bekendtgørelse om Håndbog om opfyldelse af bæredygtighedskrav og krav til besparelse af drivhusgasemissioner for biomassebrændsler til energiformål))
Sources	– Danish Forest Act: https://www.retsinformation.dk/eli/lta/2019/315 – Danish Nature Protection Act: https://www.retsinformation.dk/eli/lta/2013/951 – Sustainability Handbook: https://ens.dk/sites/ens.dk/files/Bioenergi/db584_haandbog.pdf

Step 2: Description of enforcement and monitoring

Description of the practical implementation of the law(s)	The Danish Environmental Protection Agency in collaboration with the Danish Nature Agency – both under the Ministry of Environment – enforces the Forest Act. The Danish Energy Agency under the Ministry of Climate, Energy and Utilities enforces the Sustainability Handbook.
Sources	Webpages of and consultation with the official from the relevant agencies
Is the enforcement and monitoring ensured for the identified law(s)?	✓ Yes ☐ No, Level B route is required

Step 3: Evaluation of the effectiveness of the legal framework on the legality of timber harvesting

Evaluation of the practical implementation of the law(s) and explanation for the evaluation	Regular monitoring of the enforcement is conducted and reported by the concerned agencies
Sources	Webpages of and consultation with the official from the relevant agencies
Is legal framework effective?	✓ Yes ☐ No, Level B route is required

Annex 6 REDII Level A risk assessment – Denmark continued

(v) That harvesting maintains or improves the long-term production capacity of the forest

Step 1: Identification of applicable laws	
Have the applicable law(s) been identified?	☐ Yes ✓ No, Level B route is required There is no legislation in Denmark related to the above requirement. Denmark's annual harvesting in recent years remains below the annual growth. This implies that the maintenance and improvement of the long-term production capacity of forests for timber, biomass for energy and other products
List of applicable law(s)	Not applicable
Sources	Not applicable
Step 2: Description of enforcement and monitoring	
Description of the practical implementation of the law(s)	Not applicable
Sources	Not applicable
Is the enforcement and monitoring ensured for the identified law(s)?	☐ Yes ☐ No, Level B route is required
Step 3: Evaluation of the effectiveness of the legal framework on the legality of timber harvesting	
Evaluation of the practical implementation of the law(s) and explanation for the evaluation	Not applicable
Sources	Not applicable
Is legal framework effective?	☐ Yes ☐ No, Level B route is required

Annex 6 REDII Level A risk assessment – Denmark continued

LULUCF criteria 29(7)	
Paris Agreement ratified?	✓ Yes ☐ No
Submission of a relevant NDC	✓ Yes ☐ No
Sources	– Paris Agreement: UNFCCC's party information about Denmark: https://unfccc.int/node/61052 – NDC: European Commission. (2020). Update of the NDC of the European Union and its Member States. https://unfccc.int/sites/default/files/NDC/2022-06/EU_NDC_Submission_December%202020_0.pdf
Brief description of how agriculture, forestry and land use are accounted for in NDC	**European Commission (2020):** "Accounting for emissions and removals from LULUCF follows specific rules depending on the land accounting category in accordance with Regulation (EU) 2018/841. Afforested Land and Deforested Land use baseline zero (gross-net accounting). Managed Grassland, Managed Cropland and Managed Wetland use as baseline the average emissions between 2005 and 2009 (net-net accounting). Managed Forest Land uses as baseline a Forest Reference Level based on continuation of Forest Management Practices between 2000 and 2009 and taking into account the age-class structure of forests, projected through the compliance period. The mere presence of carbon stocks is excluded from accounting."
OR (this option below must be used if the previous point about NDC is not satisfied)	
The origin country has national or sub-national laws in place, in accordance with Article 5 of the Paris Agreement, applicable in the area of harvest, to conserve and enhance carbon stocks and sinks, and providing evidence that reported LULUCF-sector emissions do not exceed removals	
Step 1: Identification of applicable laws	
Have the applicable law(s) been identified?	☐ Yes ☐ No, Level B route is required
List of applicable law(s)	
Sources	
Step 2: Description of enforcement and monitoring	
Description of the practical implementation of the law(s)	
Sources	
Is the enforcement and monitoring ensured for the identified law(s)?	

Annex 6 REDII Level A risk assessment – Denmark continued

Step 3: Evaluation of the effectiveness of the legal framework on the legality of timber harvesting

Evaluation of the practical implementation of the law(s) and explanation for the evaluation	
Sources	
Is legal framework effective?	☐ Yes ☐ No, Level B route is required